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ABSTRACT

This report, the fourth in a series of six, describes the evaluative studies conducted during Phase II of the California Educational Technology Assessment Program, the California Technology Project (CTP), and the CTP Regional Consortia. The report begins with background information on the CTP, starting with the earlier statewide network of regional Teacher Education and Computer Centers (TECCs) which was discontinued. Legislative provisions for the establishment of the CTP in 1988 are then described, as well as the planning, development emphasis, and implementation of the CTP Project. The emergence of CTP Regional Resource Consortia is discussed, and information is provided on consortium governance and operations as well as CTP staff development and telecommunications projects. Resources to support the CTP and program funding and constraints are also discussed. The CTP evaluation design for 1989-1991 is presented, and Central CTP activities are reported. Findings of evaluations of each of the 14 Regional Consortia are summarized, including background information, planning, program content and implementation, and funding resources and constraints. The evaluation of the CTP relied on a variety of data sources which included records and documents, staff interviews, self-assessment inventories by staff, and surveys of users. Copies of the questionnaires for the self-assessment inventory, the assessment of services, the telephone survey instruments, and the revised CTP Consortia Self-Assessment form are appended. (AEF)

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Comprehensive Study of Educational Technology Programs Authorized from 1989-1992

Volume IV

California Technology Project

December 20, 1991

Submitted to:
California Department of Education
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Comprehensive Study of Educational Technology Programs Authorized from 1989-1992

Volume IV

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California Technology Project

Background from 1988 to 1989

I. Background Information

Program History. In July of 1987, the Governor vetoed the funding appropriated for the state-wide network of 17 regional Teacher Education and Computer Centers (TECCs) and half of the funds allocated for the Educational Technology Local Assistance Programs authorized by Assembly Bill 803. The TECCs, operated by the California Department of Education's (CDE) Office of Staff Development, had been charged with providing professional development and technology integration services in all areas of the curriculum. The TECCs played a major role in providing staff development, technical assistance, and administrative support to individual AB 803 adoption/expansion grant projects. Between 1984 and 1987, the Office of Educational Technology provided augmentation grants of approximately $40,000 annually per TECC for AB 803 coordinators to support the adoption/expansion grants program.

During the first three cycles of Adoption/Expansion Grant projects the TECCs accepted, rated, and prioritized for funding the applications from schools in their regions. They also assisted school districts in developing educational technology plans, coordinating educational technology planning with other school reform programs, and in developing, implementing and evaluating projects.

The augmentation grants provided to the TECCs came under the Office of Educational Technology's Regional Support Services program, one of the five major initiatives of AB 803. When the TECC support services to AB 803 adoption/expansion projects were discontinued, there were no regional agencies capable of filling the void. The fiscal year four adoption/expansion grant projects, starting-up in September of 1987, and year five projects starting a year later, were left without the technical assistance they had expected and needed.

After exploring alternatives, the Educational Technology Committee recommended that $880,000 of the greatly reduced AB 803 funds for 1988-89, be allocated to establish the California Technology Project (CTP), a "leadership/support network" for the year four and five adoption/expansion grants. The CDE accepted the Committee's recommendation and expanded the plan to make the CTP equivalent to the existing state-wide California Curriculum Projects. At about the same time the Office of the Legislative Analyst released *The Educational Technology Local Assistance Program: A Sunset Review*, issued in August 1988, recommending reinstatement of the TECC services as follows:

> *We recommend that the Legislature reestablish a network of regional support service delivery centers, because the Governor's elimination of the Teacher Education and Computer Centers (TECCs) has left the Educational Technology program without an entity to (1) administer the adoption/expansion grant process and (2) provide local education agencies with needed technical assistance regarding applications of educational technology. We further recommend that the State Department of Education develop a specific funding proposal for the new network of support service delivery centers, based on anticipated workload in these areas, and submit the proposal to the Joint Legislative Budget Committee, the legislative fiscal committees, and the Department of Finance by November 15, 1988.*

As specified in AB 1470, the objectives for the CTP are to: (1) serve as a collaborative agency to link and coordinate the educational technology resources of institutions of higher education and other educational agencies and organizations; (2) identify school and district needs for regional educational technology support across California; (3) identify and train educators to provide regional and local assistance for the planning, implementation, and evaluation of educational technology programs and practices; (4) identify and disseminate information about effective educational technology resources; (5) facilitate and assist in the identification and dissemination of information about high quality instructional technology programs including computer and video programs, laserdiscs, and other media, which support California's curriculum frameworks; and (6) facilitate the establishment and coordination of regional resource consortia as well as the expansion of existing consortia to assist school sites and districts to plan and implement educational technology programs and practices. CTP services to schools include: (1) project development assistance, (2) regional staff development resources, (3) telecommunication linkage to important information about a variety of available resources, and (4) regional summer technology institutes.

The authority for the CDE to establish the California Technology Project (CTP), was found in Section 51873.3(b)(6) of AB 803, which included the following:

> *Providing for state-wide coordination among regional organizations, county superintendents of schools, school districts, and other agencies concerned with educational technology programs for the purpose of facilitating the development and economical provision of high-quality educational technology programs.*

After an eight month period of study and deliberation, the CDE developed an RFP and guidelines for the CTP based on the established California Subject Matter Projects (CDE, 1988). A competitive application process was initiated by the CDE and the Educational Technology Committee that was open to county offices of education, the University of California, the California State University, and California Community Colleges.

Current Status: The CTP was reauthorized under the current educational technology legislation, AB 1470, and is expected to continue its activities until the end of 1992 when AB 1470 will sunset. Within the first year of operation the original 10 regional consortia had expanded to 13, and a 14th has now formed in Kern County. Currently under a contract between the CDE and the Chancellor's Office of the California State University, the California Technology Project (CTP) is intended to meet a variety of state-wide needs related to the implementation of educational technology in K-12 schools and to coordinate activities related to educational technology. The CTP now operates 14 regional resource consortia in concert with other educational agencies, such as county offices of education, to provide regional delivery of services to California schools.

II. Project Planning

Project Goals and Objectives. The RFP to Conduct the California Technology Project, issued on November 1, 1988, required applicant agencies to describe how they would work with the Office of Educational Technology and the Educational Technology Committee to accomplish four major *technology support tasks*; these included:

1. Provide technology-related staff development.
2. Assist schools in developing or implementing technology plans.
3. Disseminate information about exemplary or promising technology programs.
4. Evaluate technology programs and uses of technology in California's Model Technology Schools (MTS) and other schools.

Applicants for the CTP contract were also expected to describe how they would provide *leadership* in addressing two ongoing challenges; these were:

1. Coordinating existing technology-related resources in K-12 education, at the California State University and University of California (CSU and UC) system level, in county offices of education, and in business and industry.
2. Exploring the uses of telecommunications and distance learning to improve curriculum and instruction.

The RFP also defined three kinds of state-wide *dissemination* and *linkage* functions that were expected of the successful applicant for the CTP; the project was to serve as:

1. A vehicle for future developments in software evaluation and information dissemination.
2. A link with pre-service and in-service education.
3. A contact for business and industry.

Project Priorities. The RFP directed CTP applicants to demonstrate how they would "provide the impetus needed to integrate technology into the teaching strategies and everyday experiences of California teachers and students. . . through cooperative efforts with existing resources in curriculum, instruction, and staff development." In identifying the major functions of the CTP, the RFP noted that "first among the responsibilities of the CTP" was the need "to provide assistance to the approximately five hundred schools receiving funds in the [most recent] round of AB 803 adoption/expansion grant funding." During the contract period, beginning January 31, 1989 and ending on June 30, 1990, the CTP was to plan to address four main tasks and three optional activities which are discussed in more detail in the section below, IV. Project Implementation.

III. Project Development

CTP Selection. Two agencies submitted proposals in response to the RFP; the Orange County Office of Education, on behalf of the County State Steering Committee, and the California State University (CSU). The California State University (1988) proposal, which was selected to receive the CTP contract, was titled "Pulling the Pieces Together" and addressed the challenge posed by the RFP as follows:

> *What have been lacking to date are mechanisms and procedures by which many of the "pieces" of information and activity about the educational uses of technology can be pulled together into a coherent whole. The CSU proposes to establish those mechanisms and procedures by means of the CSU California Technology Project. The vision guiding this endeavor is one of state-wide public and private sector collaboration, of a building upon and enhancing of existing resources, and of effective leadership by the The California State University to help bring together in-service and pre-service technology education service providers.*

Rationale. To address the complex set of tasks, the CSU management plan outlined a three phase management plan (described in more detail below) to provide "the conceptual arrangement necessary to bring together similar activities which occur across each of the individual tasks, and to order them in terms of chronology and importance." Cutting across the complex matrix of phases and CTP tasks, the CSU proposal indicated another element in its rationale for the project, "*underlying*. . . *beliefs* in the value of collaboration, in the capacity of the CSU to provide leadership, and the importance of using the resources of this project to build upon existing state resources, thereby maximizing its impact."

1. ***Collaboration.*** The CSU plan proposed to establish a *CTP Advisory Board*, composed of representatives from all levels of public education and the business community, and ten regional *CTP Resource Councils*, that would be based on existing model regional consortia. The regional councils, during the first year of which emerged as 13 *CTP Regional Resource Consortia* when the project was finally implemented, were to be comprised of representatives from the CSU campuses, the Association of State Technology-Using Teacher Educators (ASTUTE), business and industry, Computer-Using Educators (CUE) affiliates, county offices of education, state-funded curriculum projects, Instructional Television (ITV) agencies, Model Technology School (MTS) sites, professional organizations, school districts, the CDE, summer technology institute graduates, and the University of California.
2. ***CSU Leadership.*** Faculty members of select campuses within the CSU were to take leadership roles in establishing the Regional Resource Consortia and ultimately each of the 19 (now 20) CSU sites was to have the opportunity to participate in regional technology planning. It was assumed that the regional consortia would "provide information about, and sensitivity to, regional differences in the CTP in terms of instructional technology capacity and needs" and "spearhead the development of regional technology capacity."
3. ***Building Upon Existing Resources.*** The CSU proposal indicated that, in the spirit of the CDE's request for applications, the CTP would "build communications bridges between existing service providers, and potential clients" through "extensive efforts to make CTP products and services available. . . by means of direct mail, professional meetings, publications, and through existing communications channels like the [CDE] and the County State Steering Committee (CSSC)" using "existing computing and communications resources within the CSU including CSUNet, the Advanced Technology Institute's electronic mail and computer conferencing capacity, and satellite and Instructional Television Fixed Service (ITFS) networks."

Project Emphases. The CTP was to address all of the general education reform elements emphasized by the CDE's educational technology programs; these included:

1. ***Curriculum.*** While conceived of primarily as a "broker" of technology services, the CTP was charged with coordinating activities with other state-funded agencies, including the California Subject Matter Projects, that emphasized the use of technology to improve instruction and strengthen curriculum.
2. ***Staff Development.*** Although the RFP stressed the fact that while, "with very limited exceptions, the CTP will not provide direct staff development, curriculum development, or technology implementation assistance itself," it would be expected to "identify and facilitate the provision of such services by existing resources."
3. ***Learning Resources Management.*** All of the major functions of the CTP can be seen as contributing effective learning resources management which includes: "the coordination of all phases in the planning, identification, distribution, and use of all learning resources," including "materials, equipment, and software for instructional media and technology in all formats." In particular, the surveys conducted by various CTP assessment task forces, described in more detail below, have served to identify resources available and needed to support better utilization of technology resources throughout the state.
4. ***Dissemination.*** The CSU proposal described plans to cooperate with both the Software and Instructional Video Clearinghouses in amplifying their outreach activities. In addition, the CTP was to "develop and administer a research and dissemination database for model schools projects." The CTP is also expected to assist in the dissemination of Level I and II MTS products and promising practices.

5. ***Evaluation***. The CSU proposal outlined plans to (1) prepare and publish a *Resource Directory and Evaluation Guide*, (2) to develop the evaluation capabilities of each of the Regional Resource Councils (consortia) and (3) to implement a series of two-day workshops for evaluators who would provide direct assistance to the AB 803 adoption/expansion project.

IV. Project Implementation from 1984-1989

To some extent, the California Technology Project was patterned after the state-wide Curriculum Projects, such as the California Literature, Writing, and Mathematics Projects, that provided leadership at the local level in implementing strengthened curriculum and instructional practices. Similarly, teachers and others who would participate in CTP activities would become advocates for technology use in their schools and resources for the development of new policies and practices.

Management Plan. The CSU proposed a management plan to address the seven tasks that were specified in the RFP; the CSU approach involved three phases of activities:

Phase 1: Data Collection and Network Building, January to May 1989
Phase 2: Capacity Building, May to December 1989
Phase 3: Service Maintenance and Extension, December 1989 to end of contract

The CSU proposal also added an eighth task category, *project management*, and described how the plan would be implemented by a small professional staff that would collaborate with other agencies, an advisory body, and regional resource councils (consortia). The CTP central office would "serve as an information resource, a broker of technology-related services, an initiator and coordinator of regionalized technology staff development activities, as an educational technology consultant to various groups, and as dissemination center for Level I and II MTS project developed prototype material."

Nearly 100 pages of the CSU proposal were devoted to the description of CTP activities that would be undertaken to accomplish project management and the seven CTP tasks within and across each of the three project phases. While most of the project tasks would be accomplished primarily within a given phase, the CTP proposal identified activities, planning, training, evaluation and others, that would take place during at least some parts of all three phases. The work plan also described how activities would be coordinated at state, regional, and local levels.

CTP Project Activities. In outlining how the CTP would provide "state leadership" in implementing the activities to accomplish each of the projects tasks, the CSU proposed the following:

Task 1: *Develop and implement technical assistance services to recently funded adoption/ expansion sites*

The CSU noted that even though the AB 803 adoption/expansion projects had been operating since September of 1988, they might benefit from CTP assistance that would be getting started in February of 1989 in (1) evaluating progress in meeting their technology plan goals, (2) identifying schools with similar project programs to encourage information sharing among the projects, and (3) locating nearby technology service providers to supply technical assistance, evaluation, and training.

Task 2: *Develop and conduct a technology survey; plan for and provide evaluation services; plan for and implement coordination of research and dissemination among model schools and between model schools and others*

The CSU proposal addressed the need for large scale collections of data about the "state-of-the-state" in educational technology and to establish mechanisms to coordinate regional evaluation and dissemination services in two "strands," one dealing with state-wide surveys of technology use and the other describing provisions for regionalized technology services. The survey to collect information about educational technology use throughout California was to be subcontracted to researchers at CSU Chico. In addition, the CTP would coordinate the dissemination of research information for the Model Technology Schools (MTS) projects.

Task 3: Develop strategies and serve as Model Technology Schools resources agency

While the responsibilities to provide resource services to the MTS projects were related to those defined in Task 2, the CSU proposal focused on working with the directors of the various projects to help disseminate information, facilitate the design of packaging, help market the project research and curriculum materials, and broker MTS services to other schools.

Task 4: Provide technology training resources coordination

The CSU proposal described how a "network of experts," qualified to conduct regional staff development activities, would be established in the form of the regional resource councils (consortia) to manage referral and brokerage of services.

Task 5: Develop role, plan, and strategies for coordination of existing efforts related to software review, evaluation, and dissemination of information

The CSU proposal addressed the possibility that the California Software and Instructional Video Clearinghouses, which performed evaluation and dissemination services might be discontinued with the sunset of AB 803 and outlined alternatives for ensuring that the vital services would continue to be provided.

Task 6: Propose strategies for coordinating K-12 electronic communications and distance learning activities currently in place to achieve greater efficiency and less redundancy among existing and proposed projects

In addressing this task the CSU proposed that the CTP serve as a catalyst and coordinator for bringing together specialists in distance learning and telecommunications from throughout California to develop recommendations to help schools make effective use of these emerging technologies.

Task 7: Develop and implement a plan to improve participation of business and industry in K-12 technology use

The CSU proposal outlined means to provide schools with information about promising models of cooperation between the public and private sectors and to promote the exchange of information by including representatives from business and industry on the advisory boards of the CTP and the regional resource councils (consortia).

Information Collection. During the first year of CTP operations, the staff commissioned three major state-wide surveys to collect data on educational technology in California. The first and largest of the studies, known as the "1,000 Schools Survey" or State-of-the-State survey, was conducted by the CTP Assessment Team located at CSU Chico. The second study, dubbed the "IHE Survey" by CTP staff, was conducted by researchers at San Francisco State University. A third CTP survey, also begun in April of 1989 by personnel at the Alameda County Office of Education, was sent to all 493 AB 803 Cycle IVB adoption/expansion grant projects. See below under the section titled Central CTP Activities for detailed information regarding these three surveys.

Regional Resource Consortia. The network of CTP Regional Resource Consortia that has emerged is a testament to the dedication of hundreds of educators who are committed to the promotion of educational technology to improve instruction in the schools. Most of the consortia coordinators and governing boards are made up of teachers, district administrators, county office personnel, university teacher education faculty, and local business persons. Nearly all of these people have full-time job responsibilities with their education agencies or businesses and volunteer their time to the local consortium. As the Associate Director of the CTP put it in a recent issue of the *California Technology Project Quarterly*:

> *Most coordinators and all governing boards are volunteers, using that 25th hour in the day or buying duty or substitute time through consortium funding. Someone once wrote, "Visit your local California Technology Project Office and the staff will. . . ." There are no offices. There are no staffs. What you may find is a filing cabinet drawer borrowed from the local education agency, a nail full of phone messages, and a personal (in the ownership sense of the word) computer on which communication through TRIE/CSUNet is conducted. The location of these accouterments could be a classroom, district/county office, or even a home.*

In organizing the network of consortia, the CTP staff conducted informational meetings throughout the state. While the CTP continues to provide "seed funding for activities," overall coordination for the consortia, each consortium enjoys a high degree of autonomy. The system of regional sites is unified by a common 15-point agreement with the CTP Office that defines the conduct of business. The CTP Central office supervises the programs and services of the consortia and facilitates communication by holding regular meetings for the regional coordinators.

Consortium Governance. The CSU proposal had envisioned a consortium serving an area corresponding to each of the ten regions of the County State Steering Committee (of the California Association of County Superintendents of Schools). But when the project was initiated other regional factors were considered and twelve consortia were formed. Each consortium held organizational meetings, drafted a set of bylaws, established a governance committee that includes a coordinator, and selected a local education agency (LEA) to serve as its fiscal agent. Currently, there are 14 regional consortia.

Consortium Operations. The consortia conduct regional needs assessments to determine what types of services are best suited to their particular constituencies. Then they call upon the staff development resources within their areas to deliver what is needed and work with the entire network to fulfill the overall mission. In the first year of operations the consortia provided AB 1470 school-based grant application workshops and on-site proposal preparation. Nine of the original 13 consortia charged modest membership fees for schools and/or individuals and all relied to varying extents on in-kind support contributions from participating agencies.

In summary, each consortium is a self-initiated entity, none were predetermined in contrast to the structure of the TECCs, and all operate with considerable autonomy. A thirteenth consortium (*) was formed in 1990, and a fourteenth (**) has been formed in 1991. The 14 consortia are listed below.

1. Bay Area Regional Consortium, Hayward
2. Central Coast Consortium, Morro Bay
3. Central Valley Regional Consortium, Fresno
4. Delta-Sierra Regional Consortium, Modesto*
5. El Camino Resource Council, San Jose
6. Inland Technology Consortium, Corona
7. Kern County Consortium, Bakersfield**
8. MOD Tech Consortium, Canyon Country

9. North Coast Educational Technology Consortium. Santa Rosa
10. OCLA Technology Consortium, Orange
11. Sacramento Valley Regional Consortium, Sacramento
12. San Diego County Technology Consortium, San Diego
13. San Gabriel Valley Educational Consortium, Covina
14. Super Tech Council, Chico

MAP

CTP Staff Development. Staff development is the heart of the CTP. Both the CTP office and the regional consortia provide professional development support to the California teachers and administrators who will ultimately effect the success of technology use in schools. The aim of the staff development effort is the integration of technology into the curriculum. The consortia also provide workshops and individualized staff development support in all the other areas of technology use including planning, selection of hardware and software, project implementation, and evaluation of results.

Technology Leadership Academies. Although the CTP regional consortia provide a wide array of technical assistance services, the principle staff development activity of each consortium is an annual Technology Leadership Academy (TLA). For each TLA, the CTP control office assembles a team of "CTP Scholars," specialists in technology applications for the subject matter featured in the Academy, to develop curriculum modules for use by the regional consortia. The TLA modules identify a variety of ways that technology can be used to support the California Curriculum Frameworks to improve instruction and learning.

Then, each of the consortia adapts the materials to meet local needs and disseminates information throughout its area to recruit participants. Educators from the region receive information and take part in instructional activities involving the uses of technology to support instruction and alignment with the California Curriculum Frameworks. Each summer the TLAs have concentrated on a different subject matter area. In 1989 the subject area was literature, in 1990 history-social science, and in 1991 it will be science.

CTP Telecommunications Projects. In addition to the print medium materials, such as the *CTP Quarterly* and the reports of its survey research studies, the CTP also coordinated several types of telecommunications and distance learning activities. The CTP Distance Learning Task Force has collected and published information about resources (*Distance Learning for California Schools: A Resource Guide on Live Interactive Televised Instruction*) and addressed policy issues in another report (*Distance Learning for California School: Task Force Recommendations*).

TRIE. In cooperation with the CSU Telecommunications and Networking Resources group, the CTP set up and operates the Technology Resources In Education (TRIE) information service. The TRIE system, operated in conjunction with the CSUNet state-wide computer network, can provide several important services, including electronic mail (e-mail), bulletin boards (BBS), computer conferencing, and on-line databases. Among these on-line services is the Melvyl database that allows educators to search for bibliographic information on materials available in the UC library system and the California State Library. TRIE is also being used by the California Computer Software and Instructional Video Clearinghouses to build a database of computer and videocassette resources originally published in the *Technology in Curriculum Resource Guides* and *Updates* (1985 to 1987) and for programs evaluated by the Clearinghouses since that time. Teachers can make use of these databases through computer modems using the access number of the nearest CSU campus.

The CTP also produces and broadcasts three live interactive teleconferences via satellite to update educators throughout the state on educational technology initiatives and exemplary programs that feature educational technology to improve instruction.

V. Resources to Support the CTP

Although they are staffed primarily by volunteers, most CTP regional resource consortia find it necessary to charge membership fees and to recover expenses incurred in training activities by charging fees to participants. These costs do not include the in-kind support that is provided by the county offices, school districts, colleges and universities, and so forth that contribute staff time, office and classroom facilities, and technology resources to the work of the consortia. All of the consortia coordinators feel that they could not function without this support.

Adequacy of Resources. Since the funding for 1988-89 was limited to $880,000, it was expected that each regional CTP site would generate strong support and substantial financial commitment from each of the participating agencies. The funding share to each regional site was to be based upon the size and population of the area to be served but not strictly on a per ADA basis across the state. Rather, funding would be influenced by the nature of each region's responsibilities, its ability to meet requirements for matching funds, and other factors deemed important by the Educational Technology Committee.

After the CTP had begun to implement the CSU proposal, negotiations were held with the CDE to fund two additional regional consortia and to increase the level of support provided. Some funds allocated to support the AB 803 adoption/expansion projects could be diverted to other activities because of the low level of response.

VI. Program Funding Resources and Constraints

1. ***Program Budget.*** AB 803 funding for the first 17 months of CTP operations, February 1, 1989 to June 30, 1990, totaled $880,000. The CSU proposed budget included $245,165 in in-kind contributions. The total budget for the project was $1,125,053 including $114,768 for indirect costs.

2. ***Cost Benefits.*** The CTP has been able to provide a significant amount of service for the level of state funds invested. The CTP users reported the regional consortia were a cost-effective delivery system.

3. ***Budget Equity.*** The regional organization of the CTP consortia has led to more equitable distribution of technology support services, even in remote areas of the state that have historically been under-represented in the allocation of technology resources.

4. ***Leveraging and Institutionalization.*** One of the basic elements in the design of the CTP was its means for generating, or "leveraging," support from other education agencies and business groups. The CSU proposed budget detailed nearly a quarter of a million dollars in in-kind contributions from CSU campuses alone including $136,971 in personnel contributions from CSU campuses at Chico, Long Beach, San Francisco, Fresno, and San Bernardino and Cal Poly Pomona. There are no precise figures on the amount of local support leveraged by each of the 13 active regional consortia, but the estimated level was high.

5. ***Budgeting Procedure*** The ten regional consortia were each supposed to receive $3,500 for supplies, services for needs assessment, and training development; $1,000 for workshops for schools that had never been funded under AB 803 programs; $3,000 to conduct TLAs; and $1,500 for technology evaluation workshops.

CTP Evaluation Design for 1989-1991

The evaluation of the CTP relied on a variety of data sources which included records and documents, staff interview, self-assessment inventories by CTP staff and surveys of users.

Review of Records: The California Educational Technology Assessment Project (CETAP) staff utilized reports, articles, surveys, and other records produced by the 14 regional CTP Consortia as well as the CTP Central Office as important sources of assessment information.

Interviews of CTP Staff: Interviews were conducted with CTP Central staff to begin the assessment of major state-wide CTP initiatives. The CETAP Director attended CTP Consortia meetings to obtain additional information about CTP activities and solicited input from CTP Coordinators about various surveys and other issues related to the CTP evaluation.

Telephone interviews were added to the original proposal. These were conducted, with each of the 14 CTP Coordinators during February 1991. The results were written and presented to the Educational Technology Committee as part of a longer CTP report and are included as Appendix A.

CTP Self-Assessment Inventory: A Self-Assessment Inventory was developed by the CETAP staff to determine staff perceptions of the level of implementation of the CTP. Special attention was focused on the leveraging of additional resources and their value. Input was obtained from the CTP Coordinators on the development of the items for the Inventory. A draft survey was sent to each director for review and comment and then the instrument was discussed at a regular meeting of the group in March 1991. Following the meeting, the revised instrument was prepared for distribution. Inventory categories include: *background information, planning, program content and implementation, funding resources and constraints, outcomes,* and *recommendations.* This Inventory was completed by 13 of the consortia for 1989-90 and 14 completed the inventory for 1990-91.

The CTP Assessment of Services: An assessment survey was developed by CETAP Staff and was mailed to all members of each of the 14 CTP regions. This survey assesses the level and quality of services received by members and elicits recommendations for change and restructuring of the CTP. Survey categories include: *background, resource adequacy, type of services received, level of use of CSUNet, access to services, awareness of services,* and *recommendations.*

Breakdown of Respondents by CTP Regional Consortia Respondents were asked to identify the CTP Consortium that sponsored activities in which they participated and directed to indicate all that applied. The number of surveys sent and the percent returned is listed on the following page.

Consortium	*N Sent*	*% Return*
Bay Area Regional Consortium	74	23.8
Central Coast	22	7.1
Central Valley Regional Consortium	38	12.2
Delta-Sierra Regional Consortium	19	6.1
El Camino Resource Council	40	12.9
Inland Technology Consortium	37	11.9
Kern county Consortium	N/A[1]	----
MOD Tech Consortium	4	1.3
North Coast Educational Technology Consortium	12	3.9
OCLA Technology Consortium	13	4.2
Sacramento Valley Regional Consortium	15	4.8
San Diego	13	4.2
San Gabriel Valley Educational Technology Consortium	16	5.1
Super Tech Council	N/A[2]	----

1. Newest Consortium
2. Mailing lists not received

Other Assessments: Assessment procedures for other components of the study such as the School-Based Grants Program, Model Technology Schools Projects, and others produced information about the availability and value of CTP services. The data collected from these assessments was collected and incorporated into this section of the report. The actual assessment instruments are included as Appendix A.

Data Collection Instruments and Procedures:	**Completion Dates:**
CTP Assessment of Services Survey	May, 1991
Consortia Meetings	Monthly
Consortia Coordinator Interviews	February and May, 1991
CTP Self-Assessment Inventories	March and April 1991
Review of existing data sources and reports	August 1991

The figure on the following page lists the major evaluation questions from the original evaluation plan and the types of data sources used to provide the necessary data and information to answer these questions.

Instrumentation Matrix: California Technology Project

● = Primary Emphasis
◍ = Secondary Emphasis
○ = Little or None

To What Extent...

	Data Sources					
	Self-Assessment Inventories	Interview Protocol	CTP User Surveys	Project Proposals/Plans	Project Evaluation Reports	School-Based Grant Data
1. Were the program outcomes attained? ★	●	◍	○	◍	◍	◍
2. Were major activities implemented as planned? ★	●	◍	○	○	○	○
3. Were there changes in site-based planning for technology?	○	○	○	○	○	◍
4. Did the project support the state curriculum frameworks?	●	●	◍	○	○	○
5. Was staff development that supported implementation provided? ★	◍	●	●	○	○	◍
6. Was project implementation coordinated with other programs? ★	◍	◍	◍	○	○	◍
7. Did the project improve the management of learning resources?	○	◍	◍	○	○	○
9. Were there desired changes in instructional practices (teacher perf.)?	◍	◍	◍	○	○	○
10. Was implementation restricted and why?	●	●	◍	◍	◍	◍
11. Was implementation supported or facilitated and why? ★	●	●	○	○	◍	○
13. Was there dissemination of knowledge and/or products?	●	●	◍	○	◍	◍
14. Were unanticipated outcomes assessed? ★	◍	◍	◍	◍	◍	◍
15. Was there equal access for teachers and administrators?	◍	◍	◍	○	◍	◍
16. Did the project assist other schools to implement technology? ★	○	◍	○	○	○	●
17. Did new business and higher education partnerships result?	●	●	○	○	●	◍
18. Did the program implement the CDE goals and initiatives?	◍	●	◍	○	○	◍
19. Did the program stimulate increased school planning/resource mgt.?	◍	◍	○	○	◍	◍
20. Do teachers and administrators value the program(s)?	◍	◍	●	○	○	◍
21. Can the program be evaluated and show cost benefits?	◍	◍	◍	◍	○	○
22. Should the program be continued,discontinued, or expanded? ★	◍	◍	◍	◍	◍	◍
24. Was assistance provided by the CDE? ★	◍	●	○	○	○	○
25. Has the CTP accomplished its major objectives? ★	●	●	◍	●	●	◍
26. Has the CTP assisted in dissemination of MTS Level I and II projects? ★	◍	●	◍	○	○	●
27. Are CSU and county office of education resources leveraged?★	●	●	○	○	○	○
28. Has CSUNet been used effectively for dissemination of information?★	●	●	●	○	◍	●
29. Has CTP assisted in SBET grant development and implementation?★	◍	◍	●	◍	◍	●
30. Has the CTP been coordinated with other regional services?★	●	◍	○	◍	◍	○

★ Added to questions required by the RFP

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Central CTP Activities

The California Technology Project consists of a Central Office and fourteen regional CTP consortia. This section summarizes the activities that were implemented by the Central Office and that provided services state-wide. The activities of the Central Office can be organized into four categories:

I. **State-wide Leadership and Support for the Regional Consortia**
II. **Information Collection**
III. **Information Dissemination**
IV. **Staff Development**

The information for this section was gathered from data and records provided by the CTP Central Office, reports from CTP regional coordinators, CETAP staff interviews and observations, and a review of documents.

I. State-wide Leadership and Support for the Regional CTP's

CTP Central Office staff consists of a project director, associate director, network administrator, and student assistants. They coordinate all aspects of the CTP and support and supervise the programs and services of the regional consortia.

The primary responsibility of the Central CTP Office is to ensure that the regional consortia are successful in their efforts. The Central CTP supervises each regional consortia, overseeing the development of their by-laws, budgets, governance, and programs. The Central Office draws up a formal agreement with each region and monitors their activities in accordance with that document. Support is provided through:

- **Consortium Coordinators Meetings:** The Central CTP organizes and facilitates the meetings which provide information about state-wide developments and the activities of the other regions and of new developments in the state's educational technology efforts. The regional coordinators and membership are involved in planning CTP activities, and assist in solving regional problems.

- **Annual Retreat:** Each year a retreat is held for the regional coordinators. The retreat provides training and information as determined by the coordinators to assist the regional consortia in supporting their membership. In addition, the coordinators participate in professional development activities that enable them to continually upgrade their services.

- **On-Call Assistance:** CTP Central Office staff are available to the coordinators by telephone and electronic mail and provide them with ongoing support and information.

- **TRIE:** CTP Central Office staff collect and electronically disseminate information such as AB 1470 funding of guidelines, policies and legislative updates to coordinators.

II. Information Collection

A significant part of the CTP's mission is to collect, analyze, report, and store data describing technology use in K-12 schools and pre-service teacher preparation programs throughout California.

The CTP Assessment Team was established under a subcontract at California State University, Chico to perform this function. The three major surveys undertaken are described below in detail.

A. CTP Assessment Team Project

1. State-of-the-State Technology Survey (1,000 Schools Survey)

Purpose: The purpose of the survey was to collect information concerning the quantity, types, locations, and uses of technology presently in California schools.

Description: A state-wide survey of educational technology applications in California schools was conducted, with surveys sent to 1,000 schools in April, 1989. Responses were received from 484 of the 1,000 schools sampled. The results were published by the CTP as *An Assessment of Educational Technology Applications in California Public Schools,* July, 1990. The results provided empirical evidence to assist the CTP, CDE and the State legislature in policy formation and decision making regarding program support and budget actions. The study investigated five areas of educational technology in the public schools. These are:

- Equipment inventory of computers, audiovisual equipment, and telecommunication facilities. Location and configuration of the equipment is also reported.
- Curriculum materials and applications of the technology in the classroom. This includes the disciplines where it is in use, the amount of time students spend with the technology, and the types of materials available.
- Faculty and staff proficiency in using the educational technology, how they are trained and the areas where additional knowledge and skills are desirable.
- Dollar amounts and sources for educational technology funds used for equipment, instructional materials, staff training, facilities improvement and maintenance.
- Plans for improving instruction using educational technology and problems encountered or anticipated in technology application in the school.

Recipients of survey results: The primary audience for the survey findings are the staff of the CDE's Office of Educational Technology staff. Other audiences include educational administrators at all levels, vendors and consultants, and professional organizations/individuals with an interest in California's public education system. The database establishes a benchmark for future trend analysis in educational technology applications.

Outcomes: Seven hundred and fifty copies of the original report were distributed. Continued demand resulted in a second printing of 100 copies has been published, which are now being sold for $5.00 per copy. Other products include an on-line data base of the information which can be accessed through TRIE on CSUNet and special analysis conducted at the request from the California Department of Education, vendors and others. Persons outside the California public school system are charged a nominal fee to cover the researchers' time.

Evaluation Data: Positive comments on the value of the survey data have been reported. However, some concern was expressed about the geographically limited sample and the wording of some questions. Articles on the survey have been published in several journals including the *Journal of Educational Technology*. Inquiries about the survey and the database have been made by the National Science Foundation and school administrators in several states.

Future Plans: A survey of California teachers to inventory the use of technology in California classrooms to determine teacher perceptions about the use of technology in their own programs was conducted during the summer of 1991. The data from this survey will be available to policy makers to assist in determining future allocations for technology in the public schools.

2. *Local Assistance Survey*

Purpose: A survey was mailed to the 493 eligible AB 803 fiscal year five sites in April 1989 to determine the type of technical assistance that was needed from the CTP.

Description: One-hundred-forty-nine sites returned the questionnaire, and of those, 87 sites expressed an interest in some assistance. The most frequently requested types of assistance were:

- Assistance with identifying grant sources to obtain more hardware and software.
- Suggestions regarding technical problems such as networking or identifying hardware for specific applications.
- Identifying curriculum-related software programs that would be appropriate for a specific grade level.
- Vendor sources for the purchase of hardware and software at reasonable prices.
- Identifying local sites that had technology programs to visit.
- Recommendations for consultants to deliver technology staff development activities.

Recipients of survey results: The information derived from the survey was intended to guide the CTP in designing the services that would be offered. On-site consultations were offered to sites. The services were designed for AB 803 fiscal year three recipients, and AB 1470 School-Based grant recipients, mainly teachers and administrators at school sites.

Outcomes: A major problem was that the data was limited and available too long after the fiscal year three grants were in operation to be able to guide assistance.

3. *Project: Institute of Higher Education (IHE): Pre-service Teacher Education Survey*

Purpose: To document baseline data on courses, course components, lab experiences, credit granted, equipment available, and other resources to fulfill AB 1681 guidelines: clear credential inclusion of computer-based technology experiences in pre-service teacher education programs.

Description: A survey was sent to all institutions of higher education having an accredited teacher education program. Follow-up calls were made to increase the response rate.

Recipients of survey results: The survey provided public information for legislators and policy makers, IHE administration and faculty, and K-12 educators.

Outcomes: The survey resulted in a published report that was distributed to policy makers. The data is available on TRIE/CSUNet and has been published in the *CTP Quarterly* and *CUE Newsletter*. The author of the study has made presentations at conferences and appeared in a CTP Teleconference focusing on the linkages between in-service and pre-service teacher education. The report has generated interest because of the variation in lab hours and credit granted. Over 3,000 copies of the report have been distributed, and the CTP continues to receive requests for copies.

Future Plans: A comparative study on the correlation between the Title V regulations and the program implementation plans as filed with the Commission on Teacher Credentialing (CTC) is proposed as well as an examination of the long-term retention by students of concepts taught, applicability of concepts learned, and a comparison of program configurations.

B. Project Title: Distance Learning Task Force

Purpose: A distance learning task force was created to produce and disseminate information about distance learning resources and to conduct research on the current need for and prevalence of distance learning in the state.

Description: Efforts centered on satellite-based distance learning because it is an emerging technology for K-12 schools. The CTP's distance learning program is operated in conjunction with Cal Poly Pomona's Distance Learning Center.

In November 1989, Cal Poly sent questionnaires to assistant superintendents for educational services in 415 school districts throughout the state. The results of the survey, which had a return rate of 58 percent, represented the first comprehensive examination of the need for distance learning as perceived by local school district educational administrators.

Outcomes: The analysis of the survey yielded the following conclusions:

- There was an unexpected number of users of satellite-based distance education.
- An impressive number of districts plan to use distance learning in the near future.
- Reasons for not using this form of instruction are due to logistical impediments.
- The interactive aspect of distance learning is considered important.
- There is a generally positive attitude toward distance learning, and a substantial number of districts would use it when costs decline and more programming is available.

C. Project Title: California Instructional Software/Video Clearinghouse Collaboration

Purpose: To put the software clearinghouse resources on TRIE for access to educators state-wide. The Clearinghouse at CSU Long Beach provides evaluative information on K-12 instructional software and CD-ROM programs and cooperates with the Instructional Video Clearinghouse in the evaluation of computer-interactive videodisc programs.

Description: The Clearinghouse's evaluation activities include:

- Contacting 300+ publishers each year for evaluation copies of new instructional software.
- Training 30 to 50 educators each year to evaluate new instructional software and to match the Desirable/Exemplary programs to the California curriculum frameworks.
- Disseminate evaluative and descriptive information of Desirable/Exemplary programs by entering data onto the TRIE database and also providing information to the CUE and CMLEA newsletters for publication.
- Requesting the preview copies of Desirable/Exemplary programs on long-term loan at the 17 Software Resource Centers.
- Revising the California guidelines for the evaluation of instructional technology resources as needed to reflect advances in technology and changes in the California curriculum frameworks.
- Assisting with the development and dissemination of model lesson plans to illustrate effective classroom use of new instructional technology resources.

Persons Served: Activities of the Clearinghouse serve K-12 educators and teacher training institutions throughout California. There are 17 Software Resource Centers (SRCs) in the state.

Many of the SRCs are in former TECC locations; others have been moved to teacher training institutes. The SRCs serve as drop-in preview and evaluation sites for educators in each region and also provide software for teacher training activities to support the CTP consortia and the California curriculum projects.

Outcomes: Through the Clearinghouse, California educators are more informed users of instructional technology resources and have access to both information and resource materials. Specifically:

- Approximately 2,000 computer software programs have been evaluated by California educators.
- Information on 500 of the best computer software programs is available to educators on TRIE and/or the TIC Resource Guide Updates and Educational Software Preview Guides.
- Each of the 17 Software Resource Centers has a collection of almost 2,000 instructional software programs placed there on long-term loan by the Clearinghouse and the average value of the collection at each SRC is $128,808, with a total value of $2,104,203.
- 50 of the leading publishers of computer software and CD-ROM programs have been involved in the development of the California guidelines for instructional technology materials and have offered valuable input into recent revisions.

III. Information Dissemination

The information gathered by the CTP as well as information from other education organizations and agencies, professional organizations, business, and industry is disseminated through a variety of means.

A. Project Title: Technology Resources in Education (TRIE)

Purpose: Technology Resources in Education (TRIE) is an electronic information service

Description: TRIE services are designed with a simple "menu"interface and is intended to be easy to use. TRIE services include:

- *Electronic Mail:* Educators who have an account on TRIE may send and receive electronic mail, with features such as carbon copying of messages to other users, forwarding messages received from other users, sending mail internationally, gateways to commercial services such as AppleLink and Compuserve, and the creation of "mail groups."
- *Bulletin Boards:* The bulletin boards contain a wealth of information for educators including grant opportunities, information about model technology programs, a schedule of educational satellite broadcasts, and a variety of announcements from the California Department of Education.
- *Computer Conferencing:* This service provides opportunities for educators across the state to host or participate in on-line discussions of important educational issues. Educators making use of an existing computer conference may read the messages of others, comment to these messages, or leave a new message to provide the basis for a discussion in an existing conference.
- *On-line Databases:* The databases assist technology-using educators locate a variety of resources and information, including the results of the video and software reviews conducted by the Clearinghouses. The TRIE services are accessed by logging into a computer which is part of the larger CSUNet computer network.

- *CNN Newsroom Guides:* This database provides a teacher utilization guides for the CNN Newsroom program.

Persons served: TRIE is provided free to K-12 educators by the CTP.

B. Project Title: CTP Teleconferences

Description: CTP has produced three teleconferences each year on issues in educational technology. These satellite broadcasts were produced at Cal Poly Pomona at a relatively low cost of $5,000 to $6,000 each. The format was a discussion of the topic by a panel of experts followed by opportunities for viewers to phone in questions or comments.

Persons served: The teleconferences were open to educators and others interested in educational technology. They were downlinked to the regional CTP consortia to serve the needs of county offices of education. Participants tended to be computer coordinators and resource persons and district media specialists.

Outcomes: While the broadcasts were generally well received, after consultation with the regional coordinators it was decided to discontinue the teleconference. It was determined that to reach a wider audience and to be more effective, a larger budget was needed for additional pre-production work and for on-site broadcasts for areas of particular interest.

C. Project Title: kids2kids

Purpose: The *kids2kids Writing Circle* provides, via TRIE telecommunications system, a link between classrooms which act as each others audience during teacher-directed writing lessons.

Description: These lessons are planned in a writing portfolio which offers authors in grades K - 12 a real writing purpose to practice writing skills identified and tested in the California Assessment Program (CAP). The necessary hardware and software costs can be borne by the local user, but the essential networking system, the labor to direct and support the yearly array of writing activities, and the presentation and coordination of each matched-class activity must be provided the CTP. The CTP has provided TRIE access and financial support for the California Literature Project and the California Writing Project to enable student and teacher participation in this program. Each lesson of the writing portfolio provides teachers with instructional strategies for classroom use.

Measurement of the success as well as the degree of local positive response was measured by two current forms: testimonial and continued participation in the same project annually or an additional project at another time. Testimonials were not solicited this year as it was found to be an irritant for participating teachers last year. Continued participation, therefore, was identified as the preferred measurement.

Persons Served: The *kids2kids Writing Circle* provides six CAP-aligned writing activities throughout the school year which are accessible by any interested teacher. Each project requires individual registration, but teachers may participate in all projects. Generally, *kids2kids* enjoyed a 200 percent increase in participation this school year. Through the use of both the *FrEdMail* and *CSUNet* systems, *kids2kids* was able to impact a wide audience across both the state and the nation. Continued financial support of the CTP will enable the *kids2kids Writing Circle* to offer California teachers a viable use of telecommunications for students.

Participation by Project

No Place Like Home	26 classrooms	780 students
The Great Pumpkin	66 classrooms	1980 students
Tell It Like It Was	150 classrooms	4500 students
The Round Robin	63 classrooms	1890 students
Earth Day 1991	45 classrooms	1350 students
Superior Toy, Inc.	44 classrooms	1320 students

Outcomes: Through the efforts of the CTP and its network of local consortia, *kids2kids* has become the major on-line provider of writing activities between classrooms in California. Teachers at any school can now access this collection of writing projects via the TRIE. Consortia support in the areas of technical assistance and phone line access has been a key component of the project's success. Additionally, the core projects of the writing portfolio have proven to be very successful writing activities which have earned the support of teachers in both content-specific classes and self contained multi-subject assignments. The CTP staff attribute the success of the on-line curriculum projects to the use of purposeful core writing activities rather than add-on "events." From statements made by each of the lead teachers as they completed the match list for their project, it was generalized that *kids2kids* enjoys a high rate of both return-per-project and participation in additional projects by new users.

D. Project Title: KidConnections

Purpose: Through the technology of telecomputing, the KidConnections program provides students with learning experiences that could not be duplicated within the confines of their own classrooms.

Description: KidConnections is a pilot telecomputing program that focuses on interactive student writing exchanges, emphasizing history and social science content. Students collect and share data, participate in collaborative projects focusing on higher order thinking skills, and communicate with distant audiences by exchanging information over the telephone line using a computer and modem.

Outcomes: This pilot project had no outcomes available for inclusion in the CETAP study.

E. Project Title: *California Technology Project Quarterly*

Purpose: This specialized educational journal is intended to spotlight exemplary educational technology projects in California. Additionally, it provides regular information on activities of the regional consortia and a forum for divergent views.

Description: The *California Technology Project Quarterly* has published three issues per year for the past two years. It is devoted to discussions of current issues and exemplary programs on the effective use of technology in the teaching/learning process. It has publicized progress of educational technology to policy-makers, educators, and the public in California and other states.

Outcomes: At this time, 5,000 copies per issue have been printed and distributed to subscribers and superintendents at conferences and provided as part of project information packets. Some of the results are:

- Requests from industry have generated a subscription pricing policy.
- Over 200 subscriptions have been recorded.
- Request for reprints of articles have been received from other publications.

- Some teacher education faculty are requiring purchase of subscriptions as part of an educational technology class.

F. Project Title: Evaluator's Handbook Project

Purpose: Educational technology grant programs funded by AB 803 and AB 1470 require an evaluation component. In the past, the value of this data was not fully realized. The evaluation of the projects has often been inadequate (i. e. not methodologically sound) and there was no standardization in reporting formats so that the data could be readily aggregated. An evaluator's handbook, *Educator's Guide for Evaluating Educational Technology Programs*, (1990) is designed to provide K-12 educators with the tools necessary to plan, conduct, and report the evaluation of their educational technology project.

Description: The guide is designed to assist teachers and other technology project directors to evaluate their programs and report the results. The handbook was developed by Educational Support Systems through a contract with the CTP Evaluation Center at CSU, Chico. The guide serves three purposes:

- To provide useful information to the user for embedding the evaluation process as an integral part of the implementation of a program
- To offer standardized evaluation methodology and reporting procedures that will permit others to use the project results in making decisions about the use of technology in their schools
- To show the user that evaluation can provide policy makers with information needed for decision making.

Persons served: Recipients of AB 1470 Grants and all California teachers who are applying for technology grants and need guidance in developing an evaluation plan or who need assistance in evaluating a project or conducting assessments of on-going educational technology applications in their schools and classrooms.

Outcomes: The first two printings of 500 have been distributed, another 500 copies have been printed and are currently being sold to educators and school districts within California. The book's manuscript was circulated widely for comment by potential users and was reviewed by attendees of the evaluation workshops where it was used as an instructional reference. The reviews were generally complimentary: either good or excellent. Comments included "very helpful," "very readable," "super easy to use," "well organized" as well as constructive criticism which included "forms are the focus, put them first," "needs tabs," "need section with sample assessment tools." There were some negative notes such as "difficult to understand," "too technical," "needs glossary," and "a little too detailed."

Future Plans: As state funded technology grants are available, the handbook will be used as an instructional aid in evaluation workshops conducted by the CTP Consortia.

G. Project Title: Conferences and Seminars

Purpose: Project personnel have attended and made presentations at a wide range of professional conferences in order to disseminate information about educational technology and to publicize CTP activities.

Description: Project personnel have attended local, state, national, and international conferences and made a variety of presentations. At some of the conferences, a CTP booth has been operated to disseminate CTP information and publications and to recruit CTP consortia membership. The conferences have included K-12 educators, university faculty, school administrators, and business and industry representatives.

Outcomes: The results have been better public awareness and understanding of the CTP's mission, publicity for various CTP activities such as the Technology Leadership Academies, and recruitment of membership for CTP regional consortia.

IV. Staff Development

The final major component of the CTP is staff development. Although training is a primary function of the regional consortia, the Central Office also conducts crucial staff development activities.

A. Project Title: AB 1470 School-Based Grant Team Leader Development

Purpose: To increase the likelihood that the School-Based Grant process would be successful by training carefully selected educators to provide leadership.

***Description*:** With the assistance of the CDE a team of technology leaders designed training sessions for the CTP consortia teams who would conduct grant orientation workshops in their regions. The team planned the workshop and provide feedback to the CDE on the request for proposals (RFP) before it was released to the schools.

Persons Served: All potential grant writers for AB 1470 School-Based Educational Technology Grants.

Outcomes: Three meetings were conducted for planning purposes as well as numerous phone call conferences. Because of this opportunity, the team was able to play a greater part in the planning, staging, and presenting of the trainer of trainers workshop. The team leader development process was very successful in building a cohesive group. The CDE personnel and consultants assisted in the training of regional trainers.

B. Project Title: AB 1470 Training of Trainers Workshop

Purpose: This program was designed to provide training that would ultimately result in more curriculum-specific AB 1470 grant proposals. The training of trainers model was used to disseminate information about AB 1470 in a cost-effective way.

Description: A two day workshop was held in January 1990 for teams of staff development experts from both the regional consortia and five major school districts to facilitate orientation workshops in preparation for writing school-based grants. The workshop was preceded by several meetings of the planning committee on the content and structure of the training.

Persons Served: The CTP regional consortia and five large school districts teams who in turn serve teachers in their areas.

Outcomes: Approximately 70 people attended the training session. All objectives were met in terms of getting the information out. The interaction with site- and district-based personnel revealed relevant concerns that had not been recognized by the RFP authors or the planning team. Having the training teams together in one location provided an opportunity to discuss those concerns as well as brainstorm possible solutions. Each CTP region was able to offer grant preparation and technology use planning workshops for educators in their regions. The success (or failure) of such training was reflected by the degree to which AB 1470 project developers incorporated various aspects of the guidelines such as the technology use planning, curriculum integration, learning resources management into their plans. This study showed that most developers did closely integrate and use the information and procedures presented at the regional training sessions.

Participants were pleased with the materials received at the workshop (85% positive responses) and the follow-up support plan was also well-received (95% positive). The presentations by the Model Technology Schools Level II projects were highly regarded (92% positive). Some presentations were deemed too long and audience members commented that they should have been more varied with interspersed activity. Most presenters received at least a 75 percent positive rating.

C. Project Title: AB 1470 Readers' Conference

Description: A three day conference was conducted for the purpose of reading and evaluating the School-Based Grants. Approximately 1,700 grant applications were received to be evaluated by 165 readers. The readers were selected by the CDE to represent a cross-section of teachers, administrators, special program consultants, and teacher education faculty. The average profile of the reader indicated that most were teachers with an even grade level distribution. The readers were housed at the Ontario Red Lion Hotel and organized into teams. This reading configuration was deemed most cost effective and equitable for appropriate evaluation of the grants. Each grant was read independently by each of the three readers with a fourth reading if significant disparity existed in the scores. Holding the reading in one place over a short period of time allowed for timely evaluation and awarding of the grants.

Persons Served: Initially, all schools that wrote grants were the primary service target. However, a secondary target was individuals interested in writing grants but who were unsure what constituted a good grant. The reading process allowed those individuals to read a large number of grants and brainstorm the elements of appropriately written, effective proposals.

Outcomes:

- All 1700 proposals were evaluated with scores recorded on a computer with the assistance of CTP and CDE staff
- Readers came away with many ideas for incorporating technology into their own situation as well as a firm sense of what constitutes a well-planned technology-use program and effective proposal.
- A tremendous amount of camaraderie was created among the readers and many viewed the experience as one of the highlights of their professional improvement program.
- The process was generally considered objective and efficient with only a few problems.
- The review process will be replicated with few changes for the third year of grants funded for 1991-92.

D. Project Title: Technology Leadership Academies

Purpose: The primary objective of the workshop module was to demonstrate a technological environment when educating students.

Description: The CTP "Scholars" developed curriculum modules in the subject areas and trained representatives from each of the regional councils who could in turn conduct Technology Leadership Academies (TLA) in their respective regions. The team of scholars has expertise in the uses of technology in the curricular areas, and the content and organization of the modules were guided by the California Frameworks. The CTP Central Office provided the leadership for the development of an integrated technology model curriculum for providing in-service and staff development to educators throughout the state that would be delivered by the regional consortia.

Persons Served: The Technology Leadership Academies provide regional staff development to educators that enables them to integrate technology into each area of the curriculum.

Outcomes: The CTP scholars worked collaboratively with representatives from business and industry, model technology sites, and instructional television agencies to provide information and materials for integrating technology into the curriculum.

E. Project Title: Evaluator's Workshop

Purpose: The evaluator's workshop was used as a "training the trainers" vehicle for designated personnel in each regional consortium. These individuals in turn presented workshops in their regions for recipients of AB 1470 grants and others interested in preparing grant proposals and/or evaluating technology projects in either the school or district The workshop was developed to teach participants how to use the *Educator's Guide for Evaluating Educational Technology Programs* and the forms and templates included in the guide.

Description: An introduction explained the importance of evaluation, the purpose of evaluating education technology programs and elements of evaluation methodology. Each participant brought a copy of an educational technology grant proposal funded or not. The grant proposals was used as the basis for preparing an evaluation plan. The *Evaluator's Guide* was used as a text for the workshops.

Persons Served: CTP regional coordinators and consortia members.

Outcomes: Each consortia conducted workshops for evaluation training. The size and number of workshops varied with each consortia, and throughout the state, all AB 1470 grant recipients were trained. Generally, the participants reported the workshops were adequately organized and that they received enough information to conduct their own workshops. They reported accessibility to other evaluation reports to be an important factor for planning and conducting evaluations. Concepts in the evaluation training included:

- need for evaluation
- evaluation design
- formative evaluation and summative evaluation
- outcome indicators and variable selection
- identification of data sources
- data collection methods
- analytical techniques
- evaluation reporting.

Most participants indicated they were more confident with their ability to identify data sources. Most agreed they would recommend this workshop to a colleague. Data collected from the assessment of the School-Based Grant implementation in this study indicate that over half of the 300 project developers surveyed found the evaluation training and handbook to be very useful.

F. Project Title: California Mathematics Project Collaboration

Purpose: To encourage the appropriate use of technology as an integrated element of California Mathematics Project institutes and provide a forum to critique newly developed software and related technologies.

Description: The CTP collaboratively planned a symposium with the California Mathematics Projects which was conducted at the Lawrence Hall of Science at UC Berkeley. Teams of two people from each project attended the three-day symposium, which served as a networking opportunity for individuals charged with the infusion of technology at project sites. A variety of materials were distributed:

- Calculators for overhead projectors
- Modems
- Limited run beta copies of Geometric Sketchpad
- Accessibility to free copies of Visual Almanac
- "Walking in My Shoes" videos and video clips of ITV state buy programs
- Binders of materials, lesson plans, software reviews, and articles

Outcomes: During the summer of 1991, CTP staff worked with the University of San Francisco to support teams of high school mathematics teachers who are focusing on the incorporation of technology in the mathematics instruction. The project, *Viz Math* (for visualizing mathematics) has linked 17 high school mathematics department teams. The teachers attended a four-week institute and developed on-line mathematics lessons. Each teacher received a modem and necessary software to take back to their school so that they can maintain participation in the network.

G. Project Title: California Literature Project Collaboration

Description: The Los Angeles County Office of Education, in partnership with Apple Computer, Inc. and the California Literature Project (CLP), sponsored the Macintosh Multimedia Institute (MMI) for thirty Los Angeles area CLP teachers. These thirty teachers met for five days of training in late August and early September and then met for seven days throughout the 1989-90 year and seven more days in 1990-91. Apple donated a Mac SE 20 to each participating teacher for home use as long as they remained active in the MMI. Each school district agreed to place in the teachers classroom a Mac SE20, a laser disc player, a color video monitor, a laser printer, and a projection device.

Persons Served: The thirty CLP-MMI participating teachers and their schools and districts; the 350 educators and teachers and their school's and district's personnel in the Los Angeles area who attended the April 17 multimedia conference in Long Beach. Also served are educators state-wide who request the documents listed above.

Outcomes: Thirty K-12 teachers have been trained to use multimedia in language arts classrooms, modelling the literature-based, meaning-centered strategies recommended in the English-Language Arts Framework. Lead MMI teachers have been trained to lead one-week summer multimedia workshops.

Funding from the CTP helped the CLP-MMI establish a video disc library at LACOE and purchase multimedia software for use during the second year of the project. Funding also helped MMI participants develop, refine and disseminate MMI products for distribution to all 350 educators who attended the April 17 conference "Using Words and Images to Create Meaning" Titles of those products were: "A Description of the California Literature Project Multimedia Institute Training," "Using HyperCard to Teach CAP Writing," and "Enriching an English Language Arts Program with HyperCard and Interactive Multimedia." These titles are also available for state-wide distribution.

Anecdotal evaluations of the teacher participants generally were enthusiastic and reflective of actually using new technology skills in the classrooms. Students of teachers in the program report they are now learning to use the computer for more sophisticated applications. For example, one 5th grade student said, "I've been going to computer lab since kindergarten, but now I know how to make my own stacks on HyperCard."

Future Plans: MMI participants are now working toward disseminating and further developing programs that enhance literature-based lessons. During August 1991, they spent two days in advanced HyperCard training including scripting and stack design. The third year of training will incorporate more advanced interactive video from outside experts. More lead teachers will be trained to lead workshops. A task force will infuse multimedia into CLP Summer Institutes.

H. Project Title: California Writing Project Collaboration

Purpose: The CTP and the California Writing Project (CWP) formed an alliance to improve writing instruction and achievement through the integration of technology.

Description: The alliance supports and encourages the integration of technology into Writing Project training and draws upon the expertise of local CWP teacher/consultants for enriching project activities involving technology. Key CWP technology-using teachers have been identified as CTP/CWP associates at each site, and they are responsible for data gathering and materials distribution.

Outcomes:

- Dissemination of a technology-based newsletter to CWP sites
- Development of local technology-based newsletters
- Development and dissemination of in-service materials for technology-related in-service
- Site-based survey of CWP technology-related activities
- Dissemination of project reports at conferences and meetings and in published articles
- Several associates have growing reputations as effective leaders in the effort to integrate technology into the writing process

California Technology Project Regional Consortia

The data sources used to evaluate the fourteen California Technology Project Regional Consortia were the *California Technology Project Regional Consortia Self-Assessment Inventory* and data from the *School-Based Grants Self-Assessment Inventories* of schools that used CTP services. Following is a summary of the findings for each consortium.

El Camino Regional Consortium

I. Background Information

The El Camino Regional Consortium is operated out of the Santa Clara County Office of Education, which serves as its fiscal agent. The consortium began operations in April of 1989 and became fully operational in September of 1989. It serves a geographically defined area consisting of five counties: Monterey, San Benito, San Mateo, Santa Clara, and Santa Cruz. No fees are charged for membership in the consortium.

The consortium has an extensive set of bylaws which outline its service area, purpose, philosophy, governance structure, and finances. The organizational structure includes the Planning and Advisory Board which determines the activities of the consortium under the direction of the Coordinator. The Coordinator is a member of the Instructional Services Division of the Educational Development Center (EDC) of the Santa Clara County Office of Education and reports to the Assistant Superintendent of Instructional Services. A close relationship is maintained between the El Camino Consortium and the county office.

II. Planning

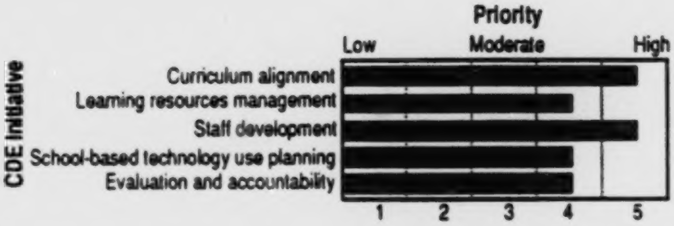
In order to assess the local needs for CTP services, surveys were conducted of teachers, administrators, and consortium members. Input from the CTP council and the judgement of the consortium staff were also used to set priorities for services. The three needs most often suggested by the surveys were staff development, integration of technology into instructional programs, and access to technology.

During 1989-90, over 100 requests were received by the consortium for AB 1470 School-Based Grant project development assistance, district level technology use planning assistance, and for information about the School-Based Grant Application Guidelines. The Coordinator estimates that between 51 and 100 requests were received for information on software and video products and technology in the curriculum staff development. Teleconference information and instructional television staff development were requested by 26-50 consortium members and between 11 and 25 members requested technical assistance with hardware.

During 1990-91, over 100 requests for information on and assistance with software/video and hardware were received. Between 51-100 requests for information on technology in the curriculum staff development were received. Between 26-50 members requested assistance with School-Based Grant Application Guidelines, teleconference information, and ITV staff development. Between 11-25 requests for technology use planning assistance and 0-5 requests for project development assistance were also received.

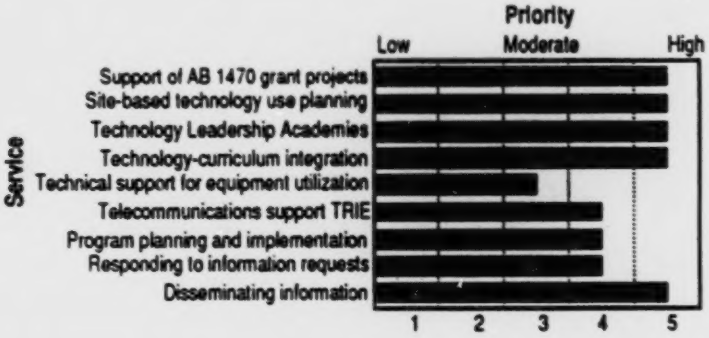
The El Camino Consortium has a formal planning group, separate from the CTP council, which develops an annual plan for consortium priorities and activities. Figure 1, on the following page, shows the priorities given to the CDE's initiatives while the plan was being developed.

Figure 1: Priority Given to CDE Initiatives



The consortium plan is used to some extent as a working document to guide its day-to-day operations. Users of consortium services provide input to the plan by means of surveys, consortium council meetings, and informal comments. The planning of activities is carefully coordinated with the existing staff development and technology resources of the Santa Clara County Office of Education. Figure 2 shows the priorities assigned to the different CTP services in the El Camino Consortium's plan.

Figure 2: Service Priorities



III. Program Content and Implementation

A. Implementation of CTP Objectives

The consortium coordinators were asked to indicate the level of implementation or emphasis of each of the 15 activities and objectives outlined in the agreements that they made with the CTP central office. Figure 3, on the following page, shows this information for the El Camino Consortium.

Overall planning and management and the planning and conducting of staff development workshops took up the greatest amount of the Coordinator's time in 1989-90, estimated at 42 percent. State and local CTP meetings took another 16 percent of the coordinator's time. The remaining 42 percent was spent on other activities, such as coordination with other agencies, developing reports and surveys, promoting TRIE and TRIE, and supporting AB 1470 grant projects. It should be noted that, besides maintaining the CTP Consortium, the Coordinator has many additional responsibilities at the Santa Clara COE. Two hundred hours of contract consultant time were used in providing support to the AB 1470 projects. Consultant time was also used extensively for planning, management, and staff development activities. Other county office staff contributed 80 hours to staff development and coordination activities and San Jose State University staff contributed 120 hours to reports, surveys, TRIE, and AB 1470 support.

In 1990-91, overall planning and management and staff development workshops took up the greatest amount of the coordinator's time, about 21 percent each. CTP state and local council meetings took up another 16 percent, and 11 percent was taken up each by coordination with other agencies, reports and surveys, CSUNet/TRIE, and AB 1470 project support. Other office staff contributed 690 hours of time for the same activities.

Figure 3: Implementation and emphasis of CTP activities and objectives

CTP Activity/Objective	Level of Implementation or Emphasis: Not implemented or emphasized	Not possible to implement of emphasiz	Not implemented or emphasized in 89-90 bu planned for 90-91	Partial implementation or emphasis	Fully implemented or emphasized	Implemented or emphasized beyond expectations
General administration of the Consortium					✓	
Facilitate exchange of information on uses of technology between and among Consortium and other educational groups				✓		
Support effective uses of technology in support of California Curriculum Frameworks					✓	
Ensure that membership, including teachers, have input into governance and planning.					✓	
Send a representative to consortium coordinator's meetings called by the central CTP					✓	
Provide a liaison and coordination between SB 1882 Consortia, County Superintendents, MTS Projects, ITV Agencies, California Subject Matter Projects, and others.					✓	
Promote educational telecommunication use of CSUNet and TRIE				✓		
Assist the state-wide CTP in information collection and dissemination activities				✓		
Provide evaluation data to the CTP central office				✓		
Conduct annual needs assessment/resource identification survey to identify training resources and priorities					✓	
Assist AB 1470 School-Based Grants program by conducting orientation workshops and other support services					✓	
Conduct annual regional CTP Technology Leadership Academy					✓	
Conduct locally determined workshops					✓	
Host a downlink site for annual CTP satellite broadcasts as requested					✓	
Submit a "Final Activities Report" to the CTP central office no later than October 15th.				✓		

B. Staff Development

A total of 12 workshops were conducted in 1989-90, including four half-day technology use planning workshops, 4 half-day AB 1470 grant-writing workshops, two Technology Leadership Academies (TLAs), and 2 workshops describing Level I and Level II Model Technology School services for AB 1470 projects. For members' convenience, the technology use planning and grant writing workshops were each held in four different counties: San Mateo, Santa Clara, Santa Cruz, and Monterey. All of the workshops provided planning and implementation assistance to participants. The TLAs each had 40 participants and both covered English-Language Arts and History-Social Science topics. A total of 586 educators received training from the El Camino Consortium during 1989-90.

A total of four workshops were conducted during 1990-91. A one day AB 1470 evaluation workshop was attended by 15 people, and 40 participants attended a five day History/Social Science TLA. Two camcorder workshops were also held, one lasting a half-day, the other for one day.

The consortium conducted formal evaluations of the TLAs, technology use planning workshops, and AB 1470 proposal writing workshops. Evaluation forms were completed by participants near the end of each activity. In general, participants reported that the workshops were well organized and that the presenters were knowledgeable and competent. Many useful suggestions for future improvements were offered.

Table 1 lists the number of staff development and awareness publications produced by the El Camino Consortium during 1990-91.

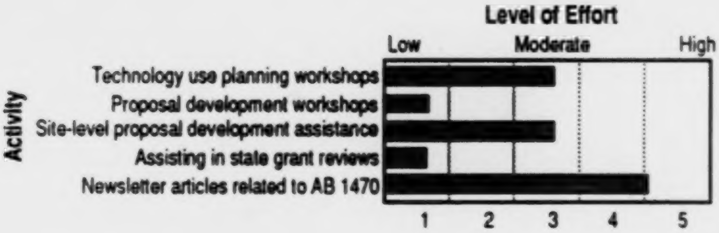
Table 1: Consortium Publications

Publications Produced or Distributed by Project	Number of Publications	Number of Copies Printed
Workshop Schedules	1	6,000
Consortium Newsletters	3	18,000
Announcements, Brochures, Flyers	3	18,000

C. AB 1470 Project Support Services

A variety of support services were provided to AB 1470 school-based projects. Figure 4 shows the level of staff effort dedicated to each of the support services provided by the consortium.

Figure 4: Support for AB 1470 school-based projects

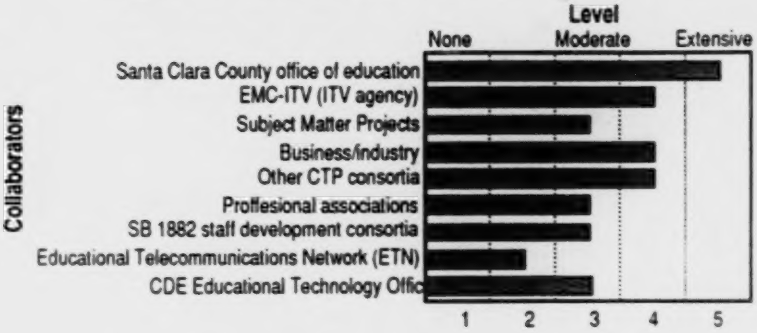


D. Collaboration with Other Agencies

The El Camino Consortium collaborated with a variety of other agencies in 1989-90. Extensive help was received from the Santa Clara County Office of Education which served as the fiscal agent and assisted in the dissemination of information and in conducting teleconferences. EMC-ITV, the Santa Clara County instructional television agency, provided support for the Technology Leadership Academies (TLA). TLA support was also provided by business and industry partnerships. Ideas and information were shared with the other CTP consortia. Professional organizations, such as ACSA and CUE provided assistance with the CTP booths at conferences. Technology planning and implementation help was received from the SB 1882 staff development consortia. Training and funding for assisting the AB 1470 school-based grant projects was received from the CDE.

In 1990-91, the consortium collaborated most extensively with the county Office of Education, ITV agencies, business and industry, and other CTP regional consortia. There was moderate collaboration with Subject Matter Projects, professional associations, SB 1882 Staff Development consortia, the CDE's Office of Educational Technology and Educational Telecommunications Network (ETN). Figure 5 shows the level of collaboration with each of these agencies.

Figure 5: Collaboration with other agencies



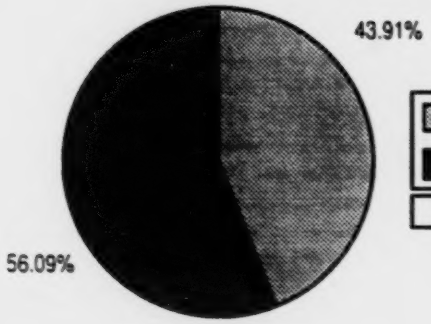
IV. Funding Resources and Constraints

A. Funding Support

The only direct cash revenue received by the El Camino Consortium in 1989-90 was $10,000 in state AB 1470 funds received from the CTP. No membership or workshop fees were collected and no services were provided on a cost-recovery basis. Only ten percent of staff time was funded by the CTP grant. Eighty percent was contributed by the Santa Clara COE, and the remaining ten percent was donated by volunteers. An estimated $15,900 was received from in-kind support from a variety of sources. Most of the support was in the form of staff time and assistance with workshops and TLAs. The coordinators and other staff support, valued at $5,000 was received from the Santa Clara COE. Other county offices of education in the region contributed $2,000 worth of staff time and mailing and promotion services. Approximately $3,000 in facilities use and human resources was donated by school districts.

In 1990-91, the only direct cash revenue received was $28,188 in AB 1470 funds from CTP. No membership fees or workshop fees were collected. Only ten percent of staff time was funded by the CTP grant. Eighty percent was contributed by the Santa Clara COE, and the remaining ten percent was donated by volunteers. A total of $36,000 was received from in-kind support. The Santa Clara COE donated the equivalent of $13,000. $5,000 was received from business and industry, $3,600 from ITV agencies, and $2,000 from colleges and universities, all as Workshop/TLA support. The County Office of Education donated $3,000 in the form of mailings, promotion, and staff time. The school district donated another $3,000 in the form of facilities and human resources. The equivalent of $1,000 was received from the CTP. Figure 6 shows the distribution of consortium revenue sources.

Figure 6: Revenue Sources 1989

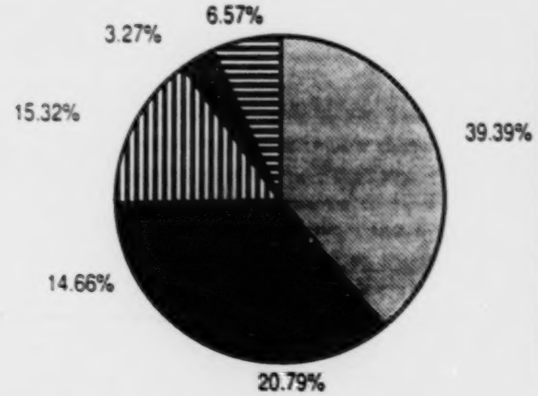


Source	1989-90 Amount	1990-91 Amount
▨ State AB 1470 funds	$10,000	$28,188
■ In-kind support	$23,700	$36,000
Total	$33,700	$64,188

B. Consortium Expenditures

The El Camino Consortium's total expenditures for 1989-90 were $33,236, including staff time, clerical support, equipment, services, and supplies donated by the Santa Clara County Office of Education and other agencies and individuals. For 1990-91, its total expenditures were $45,696 which included staff time. technical support, materials/supplies, contract services, and equipment. See Figure 7 below for consortium expenditures. See Figure 7 for consortium expenditures.

Figure 7: Consortium Expenditures



Expenditure	1989-90 Amount	1990-91 Amount
▨ Professional staff	$12,000	$18,000
■ Support staff	$9,500	$9,500
■ Materials/supplies	$5,100	$6,700
▥ Contract services/ expenses	$3,000	$7,000
■ Indirect costs (8.65%)	$1,336	$1,496
☰ Technology hardware	$2,300	$3,000
Total	$33,236	$45,696

C. Supporting and Impeding Factors

The factor that most noticeably facilitated the delivery of services was support from the Santa Clara COE and other county offices in the region. Other factors that had a facilitating effect were: CDE support, assistance from technology vendors (more could be generated with some additional effort), assistance from colleges and universities, and the help of staff in participating districts. The factor that most impeded service delivery during 1989-90 was the difficulty of accessing TRIE. Minor impediments were: travel distance required for meetings, the CTP's information distribution system, and the difficulty and expense associated with producing and distributing CTP publications.

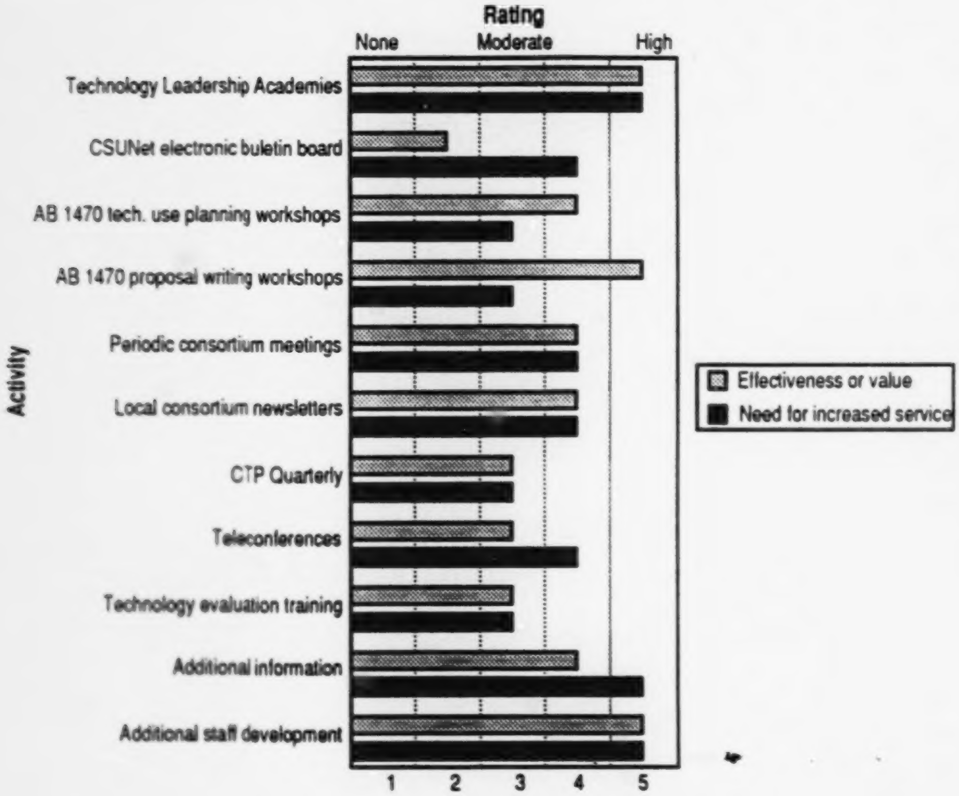
During 1990-91, the most facilitating factors were the County Office of Education, host agency support, availability of staff to provide professional development, and technology manufacturer/vendor's assistance. Slightly facilitating factors were the consortium fiscal agent, the CDE, colleges and universities, business and industry, and the availability of TRIE. Impeding factors were the lack of regular coordinator meetings with the CTP central office, the geographic size of the service area, and a lack of time to produce and distribute CTP publications. Reduced district and county resources, and reduced priority for staff development were major impediments to facilitation.

V. Outcomes

A. Impact of Services

The coordinators were asked to rate the effectiveness or value to participants of each service that was offered and to rate the need for increased service in that area. Surveys of participants were used to obtain the ratings for staff development services while comments and staff perception were used to rate the others. Figure 8 depicts the effectiveness and need for services according to the coordinator.

Figure 8: Effectiveness and need for services

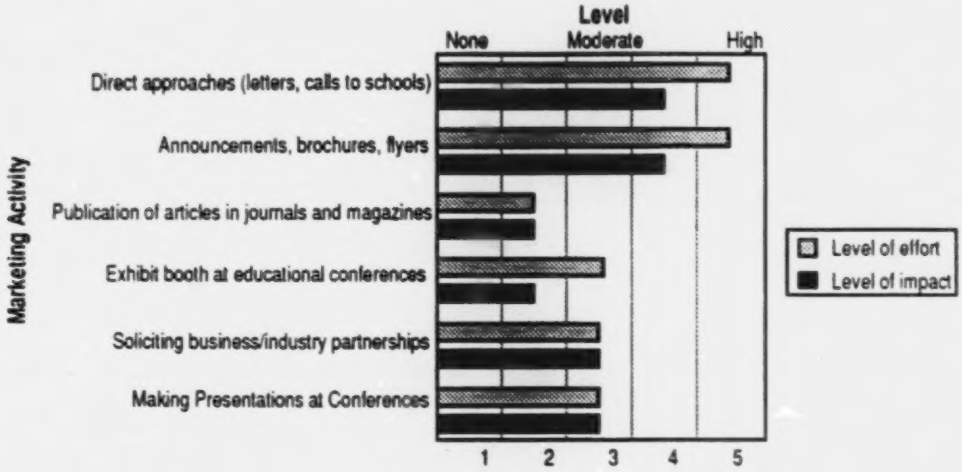


The CTP initiated activities and resources provided during 1989-90 that were of greatest benefit to educators were: AB 1470 workshops and helpline, the TLAs, and information dissemination. Over 200 trainers were trained in the AB 1470 technology use planning and grant writing workshops to write grant applications and to instruct others in proposal writing. The TLAs were also "training of trainers" sessions which encouraged the eighty participating educators to plan for and use technology in instruction. "Thousands of teachers became aware of the consortium and its services and technology use in general through the distribution of newsletters and flyers and through periodic consortium meetings," reported the coordinator. During 1990-91, activities that were of greatest benefit were TLA training, wherein 40 participants learned the potential of technology in high schools, and information dissemination, newsletters flyers, and meetings, which increased teacher awareness and use of technology in instruction.

B. Marketing Effort and Impact

The consortium coordinators were asked to indicate the level of effort devoted to different marketing strategies and to rate the level of impact produced by each activity. Figure 9 shows these ratings for the El Camino Consortium.

Figure 9: Marketing Effort and Impact



C. Cost Benefits

During 1989-90, the consortium staff stated that though funding support was adequate for meeting the objectives and expectations of the CTP, it did not support the level of service desired, expected, or needed. It would have been impossible for the consortium to have accomplished what it did without the existence of generous in-kind and volunteer assistance from a variety of sources. This in-kind support would not have been as well coordinated or directed without the AB 1470 CTP funding which served as a seed to leverage additional resources. If the AB 1470 CTP funding were terminated, some services would have had to be discontinued. .

During 1990-91, the funding support was again deemed adequate, and it would have been impossible to accomplish what they had without the in-kind funding and volunteer support. The in-kind funding and volunteer support would probably not have materialized without the initial AB 1470 funding. Some services would be discontinued if this funding were terminated.

In general, the staff indicated that the CTP Consortia model is a cost-effective approach to providing regional support services

VI. Recommendations

The following recommendations were offered by the Consortium Coordinator during 1989-90:

- The service region is large so travel is difficult – the meeting location should be rotated.
- More staff development activities and services are needed.
- Technical information is needed from technology vendors and other industry sources.
- A series of technology integration workshops should be conducted.
- Additional funding is needed to support a higher level of coordination and leadership.
- More school-based grants should be funded and a more sophisticated dissemination system is needed.
- Coordinator support should be continued or increased by the state CTP.
- Stronger ties are needed with the California Subject Matter Projects.

The following recommendations were offered by the Consortium Coordinator during 1990-91:

- More staff development is needed in telecommunications.
- Staff must be better coordinated.
- More site-based grants are needed.
- Continue full-time director support with the CTP.
- Continued ties with other state programs (SB 1882, etc.) is needed.

Bay Area Regional Consortium

I. Background Information

The Bay Area Regional Consortium (BARC) is operated out of the Alameda County Office of Education, which serves as its fiscal agent. The Consortium began operations in April of 1989 and became fully operational in June of 1989. It serves a geographically defined area consisting of six counties: Alameda, Solano, Marin, Contra Costa, Napa, and San Francisco. Fees are charged for membership in the Consortium according to a breakdown by average daily attendance (ADA). Business and industry and school districts with an ADA of less than 5,000 are charged $150. School districts with an ADA of less than 10,000 are charged $225, and schools with an ADA of more than 10,000 are charged $300.

The Consortium has an extensive set of bylaws which outline its service area, purpose, philosophy, governance structure, and finances. The BARC is administered through the Curriculum and Instructional Unit of the Alameda County Office of Education. The organization is governed by a board of representatives elected by the member organizations and districts.

II. Planning

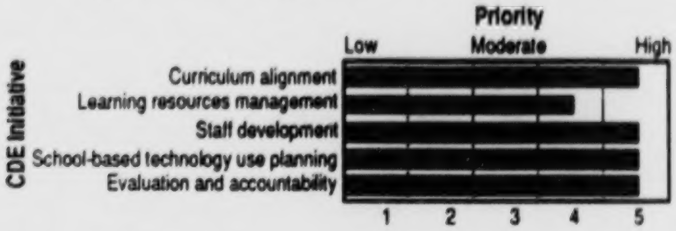
In order to assess the local needs for CTP services, the Consortium took into consideration input from the CTP council, CTP staff judgement and the East Bay CUE Staff Development survey. Of the needs suggested, the three most often mentioned were: grant writing, School-Based Grant (SBG) project implementation, and technology in the curriculum staff development. As a result of the surveys, changes were made in 1990-91. These included an increase in the use of interactive multi-media, technology use planning and restructuring, and SBG development.

During 1989-90, over 100 requests were received by the Consortium for software/video information and requests. Between 51-100 requests were handled for technology in the curriculum staff development. Twenty-six to 50 requests were handled for project development assistance, information about AB 1470 Grant Application Guidelines, ITV staff development, and TRIE Telecommunications support. Eleven to 25 requests were handled for technology use planning assistance on the school district level, technical assistance with hardware, teleconference information and staff development resource information.

In 1990-91, over 100 requests for software/video information were received. Between 51 to 100 requests for staff development on technology in the curriculum were received. Twenty-six to 50 requests were received for SBG project development assistance, SBG guidelines, ITV staff development and TRIE telecommunication support. Requests for district-level technology use planning, hardware assistance, teleconference information and staff development resource information numbered 11 to 25.

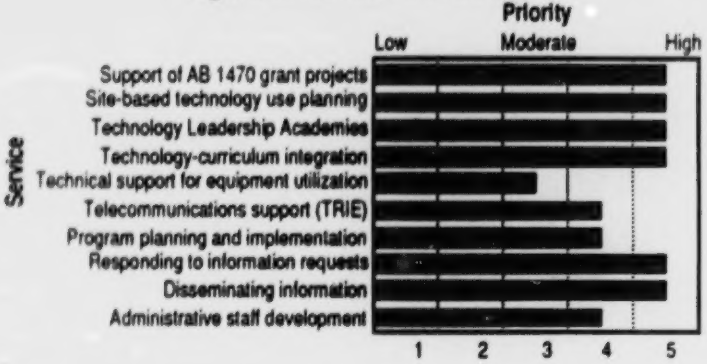
BARC has no formal planning group, separate from the CTP council, to develop an annual plan for consortium priorities and activities. During 1989-90 they were in the planning process. Figure 1 on the following page, shows the priorities given to the CDE's initiatives while the plan was being developed.

Figure 1: Priority Given to CDE Initiatives



The Consortium has input into the planning process through the forms of Consortium council meetings and informal input. The planning of Consortium activities is coordinated to a great degree with those of the host agency and is used to some extent as a working document to guide its day-to-day operations. Figure 2 shows the priorities assigned to the different CTP services in the BARC Consortium's plan.

Figure 2: Service Priorities



III. Program Content and Implementation

A. Implementation of CTP Objectives

The Consortium coordinators were asked to indicate the level of implementation or emphasis of each of the fifteen activities and objectives outlined in the agreements that they made with the CTP central office. Figure 3, on the following page, shows this information for BARC.

1989-90
The Coordinator spent approximately 19 percent of her time on overall project management, 28 percent on staff development, 22 percent on AB 1470 support and the remainder on meetings, reports, coordination with other agencies, TRIE. Clerical support time was similarly allocated. Contract consultants, volunteers and local district and COE staff assisted primarily in meetings, staff development and AB 1470 support.

1990-91
The coordinator spent approximately 12.5 percent of her time on overall project management, 35 percent on staff development, 18 percent on AB 1470 support and the remainder on meetings, reports, coordination with other agencies, and TRIE. Clerical time was similarly allocated.

Figure 3: Implementation and emphasis of CTP activities and objectives

CTP Activity/Objective	Level of Implementation or Emphasis					
	Not implemented or emphasized	Not possible to implement of emphasize	Not implemented or emphasized in 89-90 but planned for 90-91	Partial implementation or emphasis	Fully implemented or emphasized	Implemented or emphasized beyond expectations
General administration of the Consortium					✔	
Facilitate exchange of information on uses of technology between and among Consortium and other educational groups					✔	
Support effective uses of technology in support of California Curriculum Frameworks					✔	
Ensure that membership, including teachers, have input into governance and planning.					✔	
Send a representative to consortium coordinator's meetings called by the central CTP					✔	
Provide a liaison and coordination between SB 1882 Consortia, County Superintendents, MTS Projects, ITV Agencies, California Subject Matter Projects, and others.				✔		
Promote educational telecommunication use of CSUNet and TRIE				✔		
Assist the state-wide CTP in information collection and dissemination activities					✔	
Provide evaluation data to the CTP central office				✔		
Conduct annual needs assessment/resource identification survey to identify training resources and priorities				✔		
Assist AB 1470 School-Based Grants program by conducting orientation workshops and other support services						✔
Conduct annual regional CTP Technology Leadership Academy						✔
Conduct locally determined workshops					✔	
Host a downlink site for annual CTP satellite broadcasts as requested					✔	
Submit a "Final Activities Report" to the CTP central office no later than October 15th.				✔		

B. Staff Development

1989-90
There were four half-day SBG grant implementation and evaluation workshops held by the BARC serving 84 Consortium members. There were two TLA workshops in both English/Language Arts and History Social Science. Both lasted between 2-5 days and served 130 Consortium members. Other workshops included Grant writing, technology in mathematics, Amiga Video graphics, and three TRIE Telecommunications workshops. In total, approximately 400 Consortium members attended 21 workshops during 1989-90.

1990-91
There were 14 staff development workshops attended by 461 educators. These included two TLAs, three teleconferences, four SBG evaluation workshops and the remainder were technology in the curriculum.

The Consortium conducted formal evaluations of the Technology Leadership Academies, Technology Use Planning workshops, SBG project assistance, and grant writing workshops. Evaluation forms were completed by participants near the end of each activity. Table 1 lists the number of staff development and awareness publications produced by the BARC during 1989-90.

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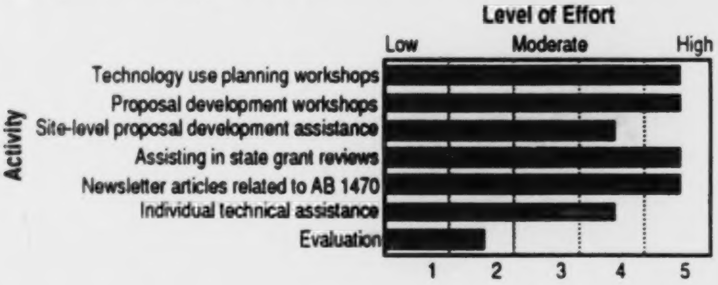
Table 1: Consortium Publications

Publications Produced or Distributed by Project	1989-90		1990-91	
	Number of Publications	Number of Copies Printed	Number of Publications	Number of Copies Printed
Workshop Schedules	10	300-1200	5	200-800
Consortium Newsletters	3	300	3	300
Announcements, Brochures, Flyers	12	300 each	15	300 each
Quarterly	3	50		
Reprints	2	200	3	200

C. AB 1470 Project Support Services

A variety of support services were provided to AB 1470 school-based projects. Figure 4 shows the level of staff effort dedicated to each of the support services provided by the Consortium. In 1990-91 five SBG orientation workshops and five SBG writing workshops were added.

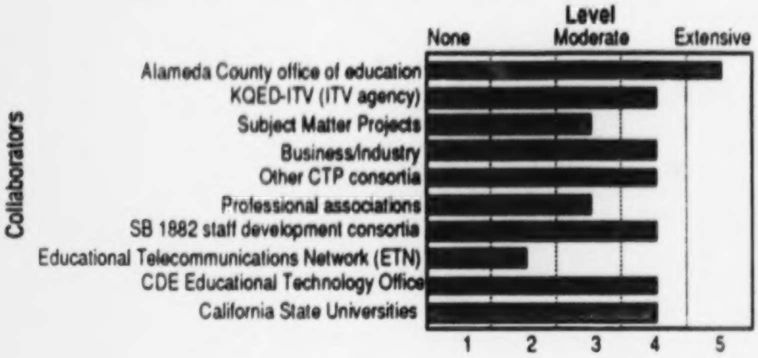
Figure 4: Support for AB 1470 school-based projects



D. Collaboration with Other Agencies

The BARC collaborated with a variety of other agencies. The Alameda County Office of Education helped by collaborative planning and meeting space. KQED-ITV assisted in planning and implementation of staff development Representatives from Subject Matter Projects attended BARC meetings and Business and Industry had consulting memberships and participated in meetings and TLAs. Assistance also came through other CTP Regional Consortia who exchanged ideas and materials. Professional associations, especially Computer Using Educators (CUE) paid a membership and produced a newsletter article. The BARC Coordinator serves on the Advisory Board of the regional SB 1882 Consortia. The Educational Telecommunications Network (ETN) shared information, the California Department of Education Educational Technology Unit offered support in the form of dissemination of materials as well as having a representative at meetings. Figure 5 shows the level of collaboration with each of these agencies. The coordinator also added that CSU Hayward and San Francisco State University assisted in the form of course credit for workshops, planning, implementing staff development and for offering workshop space and classrooms. The Disabled Children's Computer Group participated by attending meetings and sharing resources.

Figure 5: Collaboration with other agencies



IV. Funding Resources and Constraints

A. Funding Support

1989-90
The total direct cash revenue for BARC was $46,016. Of that money, $14,840 was AB 1470 funds, $16,495 was collected in workshop fees, $7,650 in membership fees, $1,025 from the direct fiscal agency, $300 from business contributions. Approximately 32 percent of staff time was funded by the CTP grant, 30 percent from the host agency and 20 percent of staff time was donated by volunteers and 28 percent funded by the districts.

An estimated $29,550 was received from in-kind support from a variety of sources. An estimated $20,650 was received from in-kind support from a variety of sources. About $12,400 was received in the director's time, printing, clerical assistance and mailings from the Fiscal Agent. Approximately $750 worth of support was received from the county office of education in the form of planning staff and meeting space. Approximately $7,500 from in-kind support was accrued by the school districts, in the from of workshop equipment, space and staff participation. The CTP, above the basic Consortium grant, gave approximately $3,000 in TLA Binders, quarterly information referrals, evaluation training and TRIE. ITV agencies participated in SBG workshops and donated material and resources, worth about $2,800. State Colleges donated about $1,100 in activity implementation survey design. Business and industry donated about $1,200 of equipment, workshop presentations and materials.

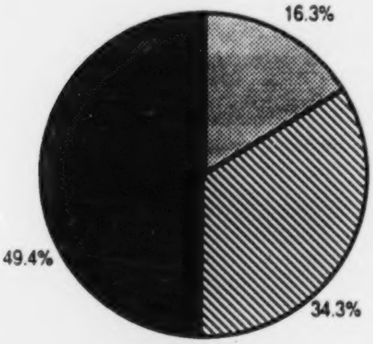
1990-91
The total direct cash revenue for BARC was $48,995. Of that money, $31,320 was AB 1470 funds from CTP, $9,660 was collected in workshop fees, $7,375 in membership fees, $150 from direct fiscal agency/host contributions, $450 from business contributions, and $40 from the sale of publications. Approximately 65 percent of staff time was funded by the CTP grant, 30 percent from the host agency and 20 percent of staff time was donated by volunteers.

An estimated $20,650 was received from in-kind support from a variety of sources. About $8,500 was received in staff time, printing, and meeting space from the Fiscal Agent. Approximately $550 worth of support was received from the county office of education in the form of assistance, membership and meeting space. Approximately $5,000 from in-kind support was accrued by the school districts, in the from of workshop equipment, space and staff participation. Other CTP Consortia donated $500 worth of material development and resources. The CTP, above the basic Consortium grant, gave approximately $1,500 in TLA materials, quarterly publications, assistance, telecommunication class funding and TRIE assistance. ITV agencies participated in workshops and donated material and resources, worth about

$1,600. State Colleges donated about $1,000 in activity implementation and facilities for workshops. Business and industry donated about $1,500 of equipment, workshop presentations and materials. East Bay CUE (EBCUE) provided about $500 in membership fees, publicity and workshop materials.

Figure 6 shows the distribution of Consortium revenue sources.

Figure 6: Revenue



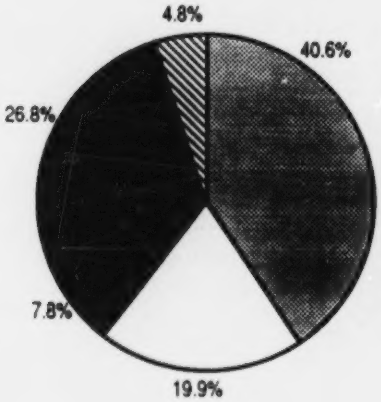
Source	1989-90	1990-91
▒ State AB 1470 funds	$14,840	$31,320
■ Other	$31,176	$17,695
▨ In-kind support	$29,550	$20,650
Total	$75,566	$69,665

B. Consortium Expenditures

The BARC's total expenditures for 1989-90 was $73,635 including staff time, clerical support, equipment, services, and supplies donated by the fiscal agent sand other agencies and individuals.

The BARC's total expenditures for 1990-91 was $80,060 including the same items as listed for 1989-90. Figure 7 show the distribution of consortium expenditures.

Figure 7: Consortium Expenditures



Expenditure	1989-90	1990-91
▒ Professional staff	$29,920	$31,391
☐ Support staff	$14,680	$12,868
■ Materials/supplies	$5,735	$8,180
■ Contract services/ expenses	$19,750	$22,500
▨ Technology hardware	$3,550	$5,120
Total	$73,635	$80,060

C. Supporting and Impeding Factors

The factors that most noticeably facilitated the delivery of services included interaction with CTP central office, the fiscal agent for the Consortium, the county offices of education, technology manufacturers and vendors, the level of support from the host agent, the availability of TRIE and the level of support from district representatives. Other factors that had a facilitating effect included: the consortiums capabilities for producing and distributing CTP publications, the availability of staff and consultants to provide professional development, the California Department of Education (CDE), CSU Hayward and San Francisco State University. The factors that impeded service include the geographic size of the service area, and the lack of recruiting at districts or schools for membership.

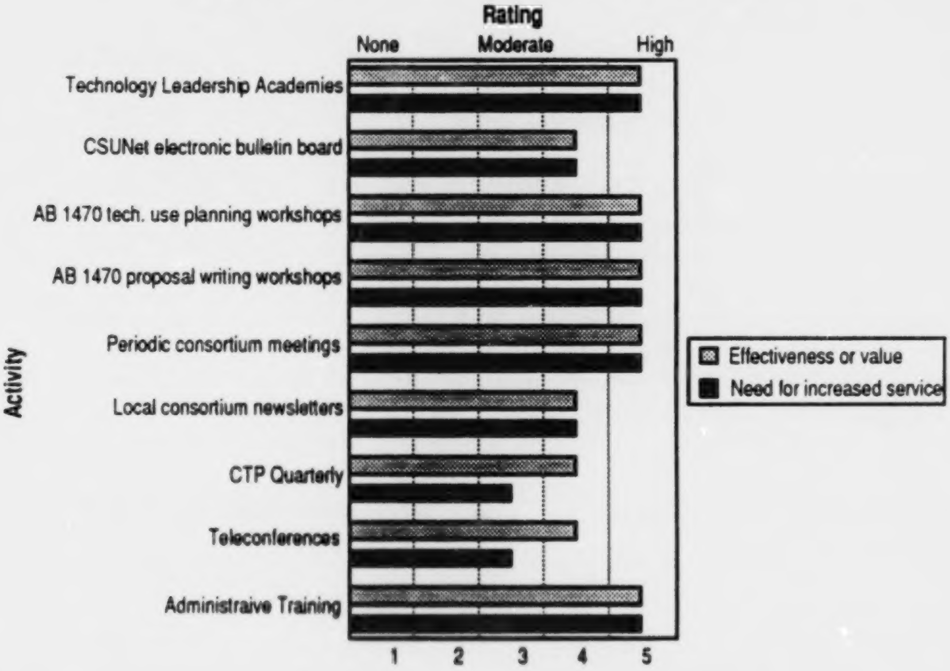
While the availability of TRIE was high the ability to access it was difficult. Minor impediments were: travel distance required for meetings, the CTP's information distribution system, and the difficulty and expense associated with producing and distributing CTP publications. Figure 8 shows the effectiveness and need for services of BARC

V. Outcomes

A. Impact of Services

The coordinators were asked to rate the effectiveness or value to participants of each service that was offered and to rate the need for increased service in that area. Surveys of participants were used to obtain the ratings for staff development services while comments and staff perception were used to rate the others.

Figure 8: Effectiveness and need for services

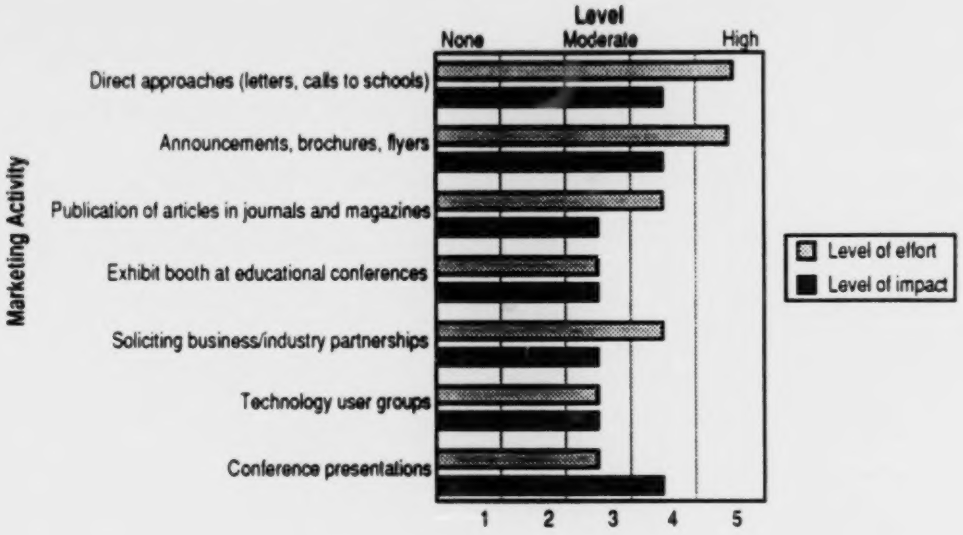


The CTP-initiated activities and resources provided that were of greatest benefit to educators included: The Technology Leadership Academy (TLA) and TLA follow-up staff development, local Consortium meetings which assisted in information sharing, resource development and problem solving and finally support of funded AB 1470 sites which provided implementation support and staff development resource information.

B. Marketing Effort and Impact

The Consortium coordinators were asked to indicate the level of effort devoted to different marketing strategies and to rate the level of impact produced by each activity. Figure 9 shows these ratings for the Bay Area Regional Consortium.

Figure 9: Marketing Effort and Impact



C. Cost Benefits

The Consortium staff state that the funding level for their Consortium was somewhat insufficient to meet the objectives and expectations of the CTP. They reported it would have been impossible to accomplish what they have without the existence of in-kind funding and volunteer assistance. The grant does however, leverage the in-kind support and volunteer help, neither of which they indicated would have occurred without the AB 1470 CTP funding. If their funding were terminated, they would probably have to discontinue most services as most of their districts do not have funds to pick up the balance. They state the CTP Consortia model is a cost-effective approach to providing regional support service.

VI. Recommendations

The following recommendations were offered by the Consortium Coordinator:

- Increase the number of consortia to meet geographical needs.
- Increase funding to support on-going staff development.
- Facilitate, through CTP Central, the state-wide coordinator meetings.
- At the State level there should be coordination between agencies.
- Maintain CTP governance structure and CTP support.

North Coast Educational Technology Consortium

I. Background Information

The North Coast Educational Technology Consortium is operated out of the Sonoma County Office of Education, which serves as its fiscal agent. The consortium began operations in September of 1989 and became fully operational in October of the same year. It serves a geographically defined area consisting of seven counties: Marin, Napa, Sonoma, Lake, Mendocino, Humboldt, and Del Norte. In 1989-90 a $75 fee was charged per site or district member. In 1990-91 a $10 University or individual fee was charged.

The consortium bylaws outline its service area, purpose, philosophy, governing structure, and finances. The consortium coordinator is a full time employee. The governing board consists of representatives from seven area counties. The consortium is operated out of the curriculum and instruction department. In 1990-91 Napa and Marin added board representatives and university students became eligible for membership. A close relationship is maintained between the Sonoma County Office of Education and the consortium.

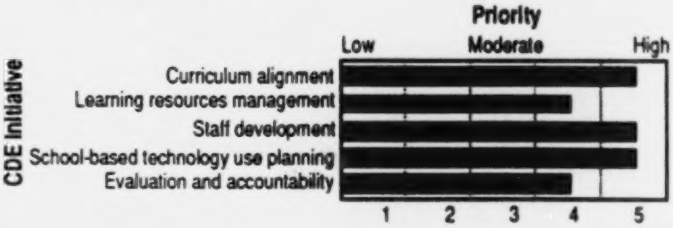
II. Planning

In order to assess the local needs for CTP services, surveys were conducted of teachers, administrators, and consortium members. Input from the CTP council and the judgement of the consortium staff were also used to set priorities for services. The three needs most often suggested by the surveys were staff development, integration of technology into instructional programs, and networking. In 1990-91 the need for more information on laserdiscs and emerging technologies was added as a concern.

During 1989-90, over 100 requests were received by the consortium for software and video information, technical assistance with hardware, information about AB 1470 grant application guidelines, technology in the curriculum and staff development workshops. An estimated 26-50 requests were handled for AB 1470 School-Based Grant project development assistance, technology use planning assistance and teleconference information. ITV staff development requests were handled for an estimated 11-25 members. In 1990-91 there was an increase in teleconference information requests, and requests for laserdisc and CD-ROM workshops.

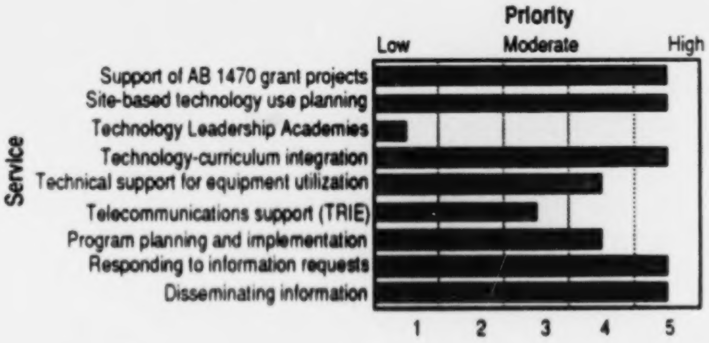
The North Coast Consortium has a formal planning group, separate from the CTP council. Figure 1, below, shows the priorities given to the CDE's initiatives while the plan was being developed.

Figure 1: Priority Given to CDE Initiatives



The consortium plan is used to some extent as a working document to guide its day-to-day operations. Users of consortium services provide input to the plan by means of surveys, council meetings, and informal comments. The planning of activities is extensively coordinated with the existing staff development and technology resources of the Sonoma County Office of Education. Figure 2 shows the priorities assigned to the different CTP services in the North Coast Consortium's plan.

Figure 2: Service Priorities



The coordinator added a few locally initiated objectives. A distance learning conference and a video teleconference network were fully implemented and emphasized.

III. Program Content and Implementation

A. Implementation of CTP Objectives

The consortium coordinators were asked to indicate the level of implementation or emphasis to each of the fifteen activities and objectives outlined in the agreements they made with the CTP central office. Figure 3, on the following page, shows this information for the North Coast Consortium.

Overall planning and management and the planning and conducting of staff development workshops and Teacher Leadership Academies (TLAs) required 50 percent of the Coordinator's time in 1990-91, with an estimated 360 hours being spent these activities during the year. State and local CTP meetings took another 17 percent of the coordinator's time. Other activities, such as coordination AB 1470 other agencies, developing reports and surveys, promoting CSUNet and TRIE, and supporting SBG grant projects represented the remaining time spent by the coordinator. One hundred and seventy hours of contract consultant time were used in providing support to the staff development workshops and CSUNet and TRIE. Consultant time represented 17 percent of the overall hours (1,234 hours) spent by consortium staff activities. Other county office staff contributed 240 hours to staff development and coordination activities and district teachers contributed 120 hours to TLA's and staff development workshops. The figures for 1989-90 were broken into approximately the same proportions.

Figure 3: Implementation and emphasis of CTP activities and objectives

	Level of Implementation or Emphasis					
CTP Activity/Objective	Not implemented or emphasized	Not possible to implement of emphasize	Not implemented or emphasized in 89-90 but planned for 90-91	Partial implementation or emphasis	Fully implemented or emphasized	Implemented or emphasized beyond expectations
General administration of the Consortium					✓	
Facilitate exchange of information on uses of technology between and among Consortium and other educational groups						✓
Support effective uses of technology in support of California Curriculum Frameworks					✓	
Ensure that membership, including teachers, have input into governance and planning.					✓	
Send a representative to consortium coordinator's meetings called by the central CTP					✓	
Provide a liaison and coordination between SB 1882 Consortia, County Superintendents, MTS Projects, ITV Agencies, California Subject Matter Projects, and others.					✓	
Promote educational telecommunication use of CSUNet and TRIE				✓		
Assist the state-wide CTP in information collection and dissemination activities				✓		
Provide evaluation data to the CTP central office			✓			
Conduct annual needs assessment/resource identification survey to identify training resources and priorities					✓	
Assist AB 1470 School-Based Grants program by conducting orientation workshops and other support services						✓
Conduct annual regional CTP Technology Leadership Academy			✓			
Conduct locally determined workshops					✓	
Host a downlink site for annual CTP satellite broadcasts as requested					✓	
Submit a "Final Activities Report" to the CTP central office no later than October 15th.		✓				

B. Staff Development

Fourteen workshops were conducted in both the 1989-90 and 1990-91 years. Both consortium years included AB 1470 orientations, AB 1470 technology use planning workshops, and multimedia workshops. Other activities included a Technology in Education overview, a technology tool application workshop, AB 1470 grant writing, video teleconference training and several others. In 1990-91 they added two two-day history and social studies Technology Leadership Academies. In total 1,058 educators were trained by the North Coast Consortium. The most highly attended workshops were AB 1470 orientation sessions.

The consortium conducted formal evaluations of the technology leadership academies, AB 1470 project assistance, and AB 1470 proposal writing workshops. Evaluation forms were completed by participants near the end of each activity.

Table 1 lists the number of staff development and awareness publications produced by the North Coast Consortium during 1989-90.

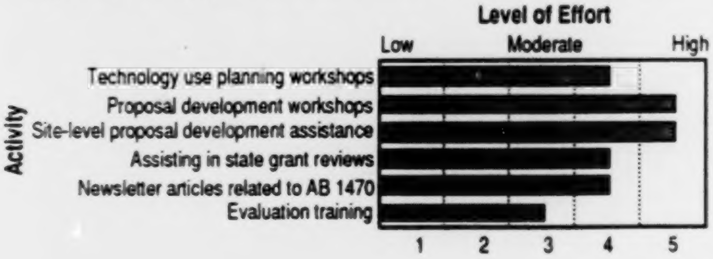
Table 1: Consortium Publications

Publications Produced or Distributed by Project	1989-90		1990-91	
	Number of Publications	Number of Copies Printed	Number of Publications	Number of Copies Printed
Workshop Schedules	2	500	2	1000
Consortium Newsletters	0	0	0	0
Announcements, Brochures, Flyers	10	3000	3	600

C. AB 1470 Project Support Services

A variety of support services were provided to AB 1470 school-based projects. Figure 4 shows the level of staff effort dedicated to each of the support services provided by the consortium.

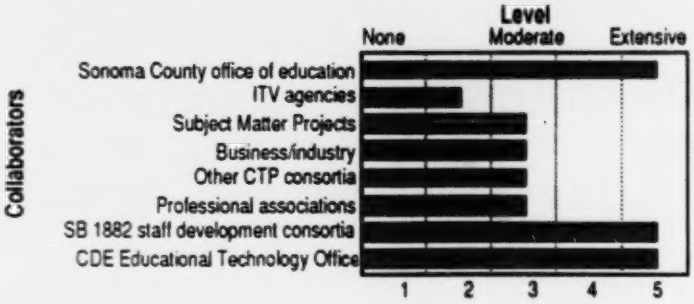
Figure 4: Support for AB 1470 school-based projects



D. Collaboration with Other Agencies

The North Coast Consortium collaborated with a variety of other agencies. Extensive help was received from the Sonoma County Office of Education which served as the fiscal agent and lent equipment, staff time and meeting rooms to the Technology Leadership Academies. The SB 1882 staff development consortia helped a great deal by participating in planning, grant writing, and implementing of the technology plan. The CDE's Educational Technology Unit helped by providing AB 1470 grant support and Proposition 98 school accountability report cards. Other sources of help included ITV agencies, which participated in technology use planning sessions. The California Subject Matter Projects planned and funded support, and provided training on TRIE. Business and industry held training demonstrations and presented at meetings. Other CTP regional consortia designed and developed AB 1470 grant support. The consortia members participated with CUE members at regional technology fairs Figure 5 shows the level of collaboration with each of these agencies.

Figure 5: Collaboration with other agencies



IV. Funding Resources and Constraints

A. Funding Support

1989-90
The direct cash revenue was $29,405 for the North Coast Consortium. This is broken down in the following manner: $26,000 in funds from the state AB 1470 grant, $1,370 in workshop fees, $1,035 in membership fees and from the Sonoma County Office of Education the consortium received $1,000. Forty percent of staff time was funded by the CTP grant, 40 percent by the host agency and 20 percent by volunteers.

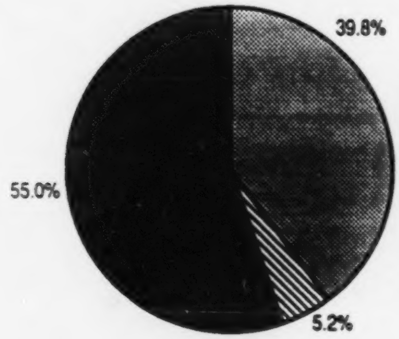
An estimated $36,000 was received from in-kind support from a variety sources. The Sonoma County Office of Education provided clerical and certificated staff time, office space and equipment use totalling approximately $20,000. School districts provided about $4,000 worth of time for presentation, equipment loans and meeting rooms. Other consortia provided materials and free participation at meetings. The CTP gave about $5,000 in quarterly publications, satellite updates and the TRIE network. Colleges an universities provided meeting rooms and participated at meetings. Business and Industry provided about $5,000 in equipment loans for training and personnel time.

1990-91
Total direct cash revenue amounted to $27,030. Of this amount $17,280 came from the State AB 1470 CTP grant, workshop fees brought in $8,000, membership fees of $1,500 (not yet cost recovery) and $250 for the sale of publications. In 1990-91 the amount of time donated by volunteers increased: Forty percent of staff time was funded by the CTP grant, 30 percent by the host agency and 30 percent by volunteers.

In-kind support remained fairly constant at $37,500 and was allocated from the same sources in the same proportional amounts.

Figure 6 shows the distribution of consortium revenue sources.

Figure 6: Revenue Sources

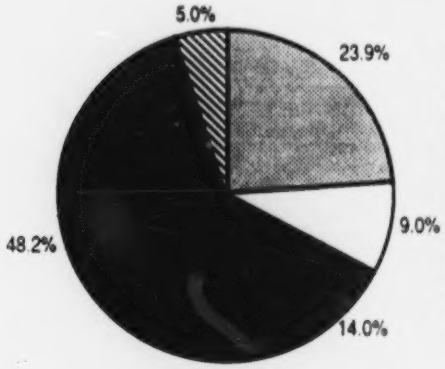


Source	1989-90	1990-91
▨ State AB 1470 funds	$26,000	$17,280
■ In-kind support	$36,000	$37,500
▧ Other	$3,405	$9,750
Total	$65,405	$64,500

B. Consortium Expenditures

The North Coast Educational Technology Consortium total expenditures for 1989-90 and 1990-91 were constant at $33,500 including staff time, clerical support, equipment, services, and supplies donated by the Sonoma County Office of Education and other agencies and individuals. Figure 7 shows the distribution of consortium expenditures.

Figure 7: Consortium Expenditures



	Expenditure	1989-90	1990-91
▒	Professional staff	$8,000	$11,000
☐	Support staff	$3,000	$4,500
■	Materials/supplies	$4,700	$5,000
▦	Contract services/ expenses	$16,135	$13,000
▨	Indirect costs	$1,671	$1,120
	Total	$33,506	$34,620

C. Supporting and Impeding Factors

The delivery of services was strongly supported by the Sonoma County Office of Education and the California Technology Project central office. The county office provided staff, clerical support, office space and facility use. Technology manufacturers donated and lent equipment, staff time, software and presenters and trainers. Other facilitation factors included support from membership fees, the availability of staff and consultants to provide professional development, the availability of TRIE, and the capabilities for reproducing and distributing CTP publications.

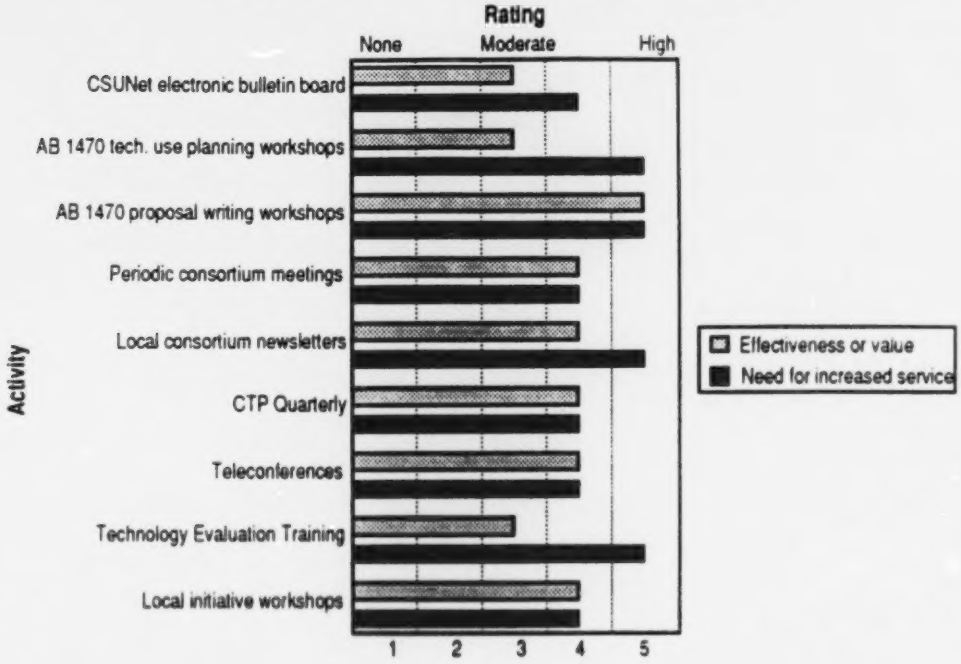
Service delivery was most impeded during 1989-90 by the size of the service area, which made travelling difficult. Also the recruiting of districts and schools for membership took time away from delivering services. The same facilitating and impeding factors continued to the same degree at the North Coast Consortium during 1990-91.

V. Outcomes

A. Impact of Services

The coordinators were asked to rate the effectiveness or value of each service offered and to rate the need for increased service in that area. Surveys of participants were used to obtain the ratings for staff development services while comments and staff perceptions were used to rate the others. See Figure 8 for ratings of service needs and effectiveness.

Figure 8: Effectiveness and need for services

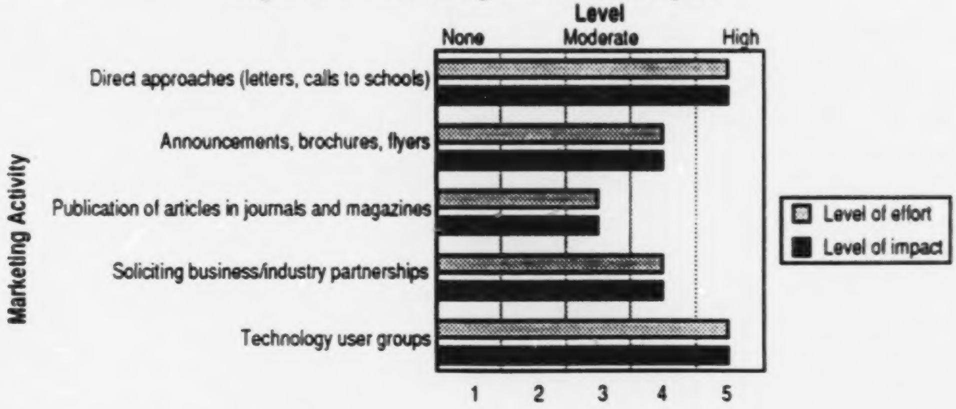


The activities and resources the CTP provided during 1989-90 that were of greatest benefit to educators were: AB 1470 proposal writing support, technology use planning, local initiative workshops and information dissemination. In 1990-91 the TLAs also took a prominent spot as being useful.

B. Marketing Effort and Impact

The consortium coordinators were asked to indicate the level of effort devoted to different marketing strategies and to rate the level of impact produced by each activity. Figure 9 shows these ratings for the North Coast Consortium.

Figure 9: Marketing Effort and Impact



C. Cost Benefits

The consortium staff states that its funding support is somewhat insufficient to meet the objectives and expectations of the CTP. It would have been impossible to accomplish what they have without the existence of in-kind funding and volunteer assistance. The support however, would not have occurred without the leverage of the funding. If state funding were terminated the consortium would discontinue most services and look to participant fees to recover all costs. The coordinator indicated the CTP model is a cost-effective approach to providing regional support services

VI. Recommendations

The following recommendations were offered by the Consortium Coordinator in 1989-90

- The service region should be divided into three "sub" regions to hold meetings and host events and to shorten driving time.
- Look for ways to get support from business and industry, and set fees to recover costs.
- Gather information from all parts of the region.
- Work more closely with institutions of higher education and regional projects.
- Support for the grant process was necessary to deliver services to entire region and it will be needed in the future.

The coordinator offered the following recommendations in 1990-91:

- New "implementation" training and support is needed beyond existing orientations and overview sessions.
- Additional time needs to be spent developing revenue sources.
- More evaluation should be done to assess the value of technology use in education.
- More contact with CTP board members is needed.

OCLA Technology Consortium

I. Background Information

The Orange County Los Angeles (OCLA) Technology Consortium is operated out of the Orange County Department of Education, which serves as its fiscal agent. The consortium began operations in June of 1989 and became fully operational in November of 1989. It serves a geographically defined area which includes Orange County and the southern part of Los Angeles county. The consortium charges $75 for district membership in the consortium, and $10 for associate membership. The consortium raised membership dues to $95 for 1991-92.

The organizational structure of the consortium consists of one representative from each district that attends meetings. There is an executive board consisting of eight people.

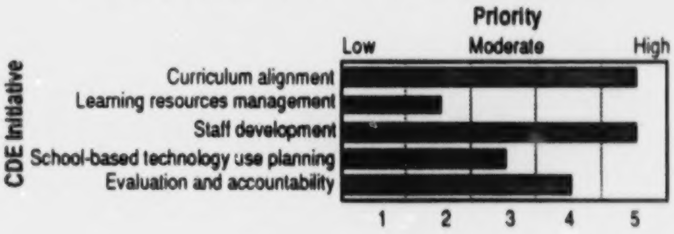
The number of schools served by the OCLA Technology Consortium increased from 674 in 1989-90 to 781 in 1990-91. An anticipated change in the 1991-92 year is to arrange for business partnerships.

II. Planning

The assessment of local needs for CTP services were derived from surveys of consortium members, input from the CTP council and CTP staff judgement. The three needs most often suggested were hands-on experience with technology, exploring all educational technology, and hypermedia. During both the 1989-90 and 1990-91 years, an estimated 51-100 requests were handled for AB 1470 School-Based Grant project development assistance, district level technology use planning assistance, and for information about the AB 1470 Grant Application Guidelines. The Coordinator estimates that between 26-50 requests were received for information on software and video products and technical assistance with hardware, teleconference information and technology in the curriculum staff development. Eleven to 25 requests were handled for ITV staff development and information about the telecommunications workshop.

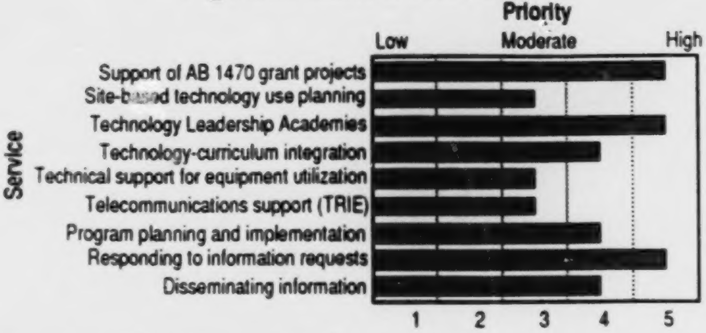
The OCLA Technology Consortium has a formal planning group, separate from the CTP council, which develops an annual plan for consortium priorities and activities. Figure 1, below, shows the priorities given to the CDE's initiatives.

Figure 1: Priority Given to CDE Initiatives



The consortium plan is used to some extent as a working document to guide its day-to-day operations. Users of consortium services provide input to the plan by means of surveys, consortium council meetings, and informal comments. Figure 2 shows the priorities assigned to the different CTP services in the OCLA Consortium's plan.

Figure 2: Service Priorities



III. Program Content and Implementation

A. Implementation of CTP Objectives

The consortium coordinators were asked to indicate the level of implementation or emphasis of each of the fifteen activities and objectives outlined in the agreements that they made with the CTP Central Office. Figure 3 shows this information for the Consortium.

In 1990-91, 80 percent of the Coordinator's time was spent in overall planning and management. Time was also spent at CTP state and local council meetings, staff development and workshops, reports and surveys, TRIE as well as AB 1470 project support. In total, the Coordinator spent 584 hours on CTP related activities. Also instrumental in the implementation of the consortium's plan were contract consultants, TLA volunteers and vendor volunteers. This was approximately the same as in 1989-90 when 78 percent of the coordinator's time was spent on overall planning and management.

Figure 3: Implementation and emphasis of CTP activities and objectives

	Level of Implementation or Emphasis					
CTP Activity/Objective	Not implemented or emphasized	Not possible to implement of emphasize	Not implemented or emphasized in 89-90 but planned for 90-91	Partial implementation or emphasis	Fully implemented or emphasized	Implemented or emphasized beyond expectations
General administration of the Consortium					✓	
Facilitate exchange of information on uses of technology between and among Consortium and other educational groups				✓		
Support effective uses of technology in support of California Curriculum Frameworks					✓	
Ensure that membership, including teachers, have input into governance and planning.					✓	
Send a representative to consortium coordinator's meetings called by the central CTP				✓		
Provide a liaison and coordination between SB 1882 Consortia, County Superintendents, MTS Projects, ITV Agencies, California Subject Matter Projects, and others.				✓		
Promote educational telecommunication use of CSUNet and TRIE				✓		
Assist the state-wide CTP in information collection and dissemination activities		✓				
Provide evaluation data to the CTP central office				✓		
Conduct annual needs assessment/resource identification survey to identify training resources and priorities					✓	
Assist AB 1470 School-Based Grants program by conducting orientation workshops and other support services					✓	
Conduct annual regional CTP Technology Leadership Academy					✓	
Conduct locally determined workshops				✓		
Host a downlink site for annual CTP satellite broadcasts as requested					✓	
Submit a "Final Activities Report" to the CTP central office no later than October 15th.					✓	

B. Staff Development

In the first year of the OCLA Technology Consortium there were 34 workshops given with a total of 400 educators receiving training. The 34 workshops ranged from computer training and video production to "on-line resources" and SBG writing. A total of fifteen diverse workshops were conducted in the 1990-91 year with a total of 470 educators receiving training. These workshops ranged from four AB 1470 evaluation workshops, and grant writing workshops to a variety of different activities including Mac/IBM/Apple IIGS networking, writing on the computer, The California Science framework, computer inter-active laser discs, science lesson activity plan and telecommunications.

The consortium conducted formal evaluations of the Technology Leadership Academies (TLAs), technology use planning workshops, AB 1470 proposal writing workshops and other AB 1470 project assistance. Table 1 lists the number of staff development and awareness publications produced by the OCLA Technology Consortium during 1989-90.

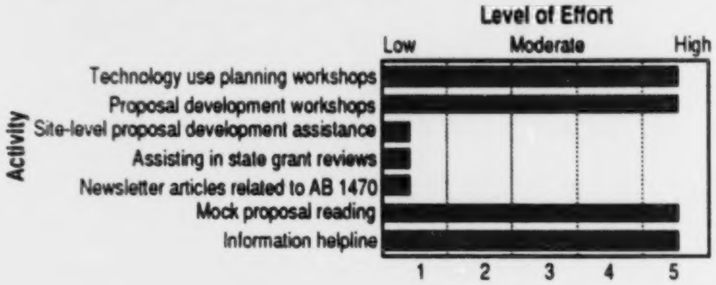
Table 1: Consortium Publications

Publications Produced or Distributed by Project	1989-90		1990-91	
	Number of Publications	Number of Copies Printed	Number of Publications	Number of Copies Printed
Workshop Schedules	17	250 each	4	1150 each
Consortium Newsletters	0	0	0	0
Announcements, Brochures, Flyers	17	250 each	20	5956
OCLA Brochure			1	5000

C. AB 1470 School-Based Project Support Services

A variety of support services were provided to AB 1470 school-based projects. Figure 4 shows the level of staff effort dedicated to each of the support services provided by the consortium.

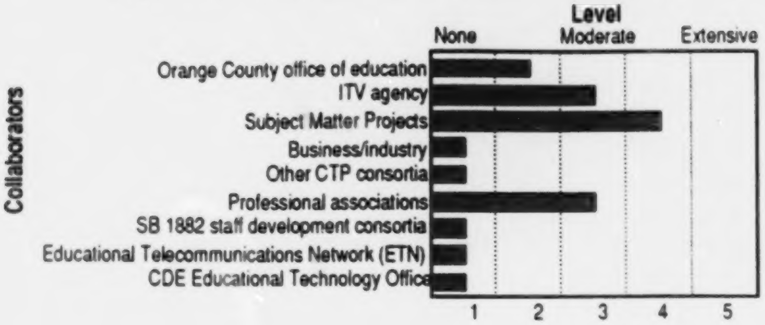
Figure 4: Support for AB 1470 school-based projects



D. Collaboration with Other Agencies

The OCLA Technology Consortium collaborated with a variety of other agencies. Extensive help was received from ITV agencies in the form of hosting teleconferences, being active on county committees and assisting in the planning for a summer TLA. Also helpful were the California Subject Matter projects. The Writing project members were active in council and The Science project helped with TLA. Business and industry helped get partners for trainings and various professional associations (CUE, ACSA, CTA etc.) helped disseminate information, as did the county office of education and other CTPs. Figure 5 shows the level of collaboration with each of these agencies.

Figure 5: Collaboration with other agencies



IV. Funding Resources and Constraints

A. Funding Support

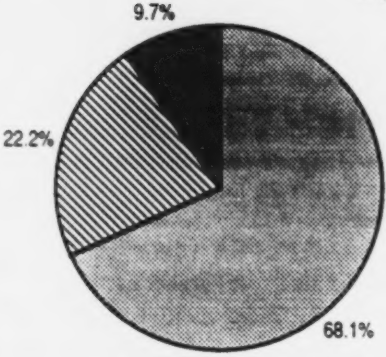
1989-90
The OCLA consortium received a total of $15,245 in direct cash revenue. Of that amount, $11,500 was received from the CTP AB 1470 funds, $890 from workshop fees, and $2,885 from membership fees. Thirty-five percent of staff time was funded by the CTP grant and 65 percent was donated by volunteers.

The OCLA Consortium also received various forms of in-kind support. The school districts donated school facilities for workshops with an estimated value of $1280, business and industry donated software valued at $300 and RETAC (Regional Educational Television Advisory Council) donated $60 worth of video tapes.

1990-91
The OCLA consortium received a $27,000 AB 1470 CTP grant, $280 from workshop fees, and $422 from the sale of publications. The CTP gave OCLA $900 for the telecommunications workshop. In total the OCLA received $29,427 in direct cash revenue during 1990-91. Fifty percent of staff time was funded by the CTP grant and 50 percent was donated by volunteers.

The various forms of in-kind support included: sixteen hours of time by the county office of education in the form of printing, mailing and meeting rooms, forty hours by the school districts in meeting rooms, 12 hours of presentations at TLAs by ITV agencies, eleven hours of assistance by colleges and universities in the forms of meeting rooms, computers, modem, and phone lines. Business and industry also donated 18 hours of help at the science TLA. Figure 6 shows the distribution of consortium revenue sources.

Figure 6: Revenue Sources



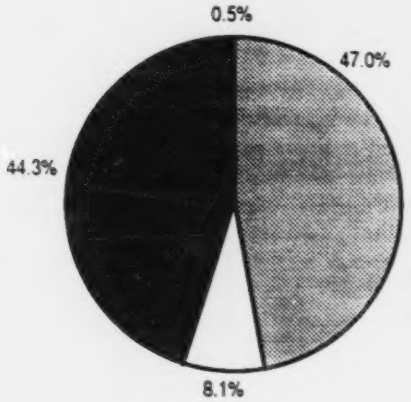
Source	1989-90	1990-91
▒ State AB 1470 funds	$11,500	$27,000
▨ Other	$3,745	$2,427
■ In-kind support	$1,640	Unknown
Total	$16,885	-

B. Consortium Expenditures

The OCLA Technology Consortium total expenditures for 1989-90 were $11,391 including $5,777 for the Coordinator, $5,449 for consultants and the remaining $165 for supplies and clerical time. Overhead was donated by the fiscal agency, the Orange County Department of Education.

The OCLA Technology Consortium total expenditures for 1990-91 were $15,673 including staff time, clerical support, equipment, services, and supplies donated by the fiscal agency and other agencies and individuals. Figure 7 shows consortium expenses.

Figure 7: Consortium Expenditures



Expenditure	1989-90	1990-91
▨ Professional staff	$5,777	$9,322
☐ Materials/supplies	$1,000	$1,186
■ Contract services/ expenses	$5,449	$5,165
■ Technology hardware	$65	$0
Total	$11,391	$15,673

C. Supporting and Impeding Factors

The factor that most noticeably facilitated the delivery of services was support from CSU Long Beach and CSU Fullerton, and the availability of staff and consultants to provide professional development. The coordinator was especially impressed by the way they were available while holding full time jobs. Business and industry was also helpful as was interaction with CTP central office, technology manufacturers, and the availability of TRIE.

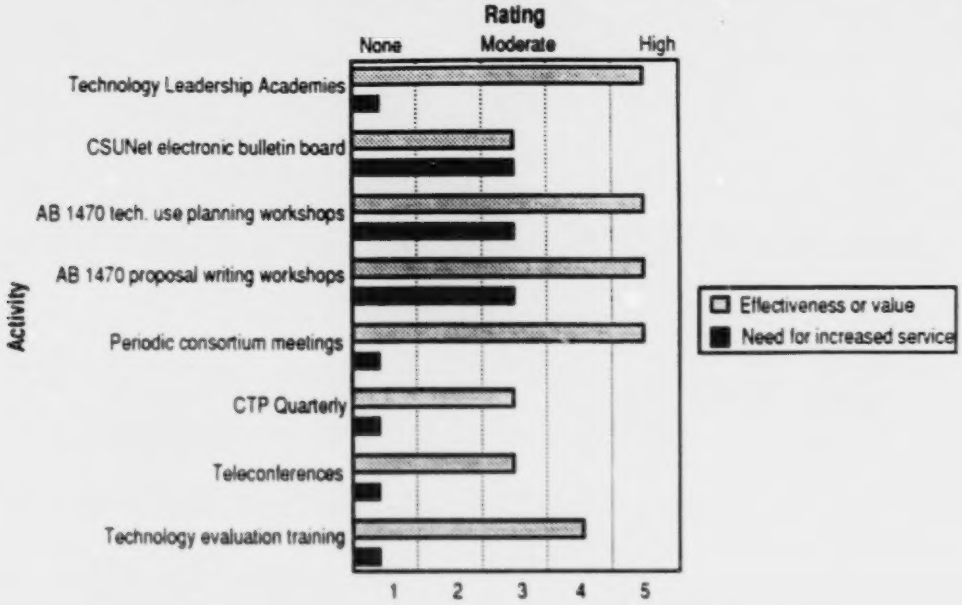
The coordinator noted several impeding factors in implementing the CTP activities, including the geographic size of service area, especially in light of the heavily traveled Los Angeles freeways. Also impeding was the the level of support from membership fees, which prevents the Consortium from being self supporting; even after raising fees by $20 in the second year of operation. The Coordinator found the lack of capabilities for producing and distributing CTP publications to be an impediment.

V. Outcomes

A. Impact of Services

The coordinators were asked to rate the effectiveness or value to participants of each service that was offered and to rate the need for increased service in that area. See Figure 8.

Figure 8: Effectiveness and need for services

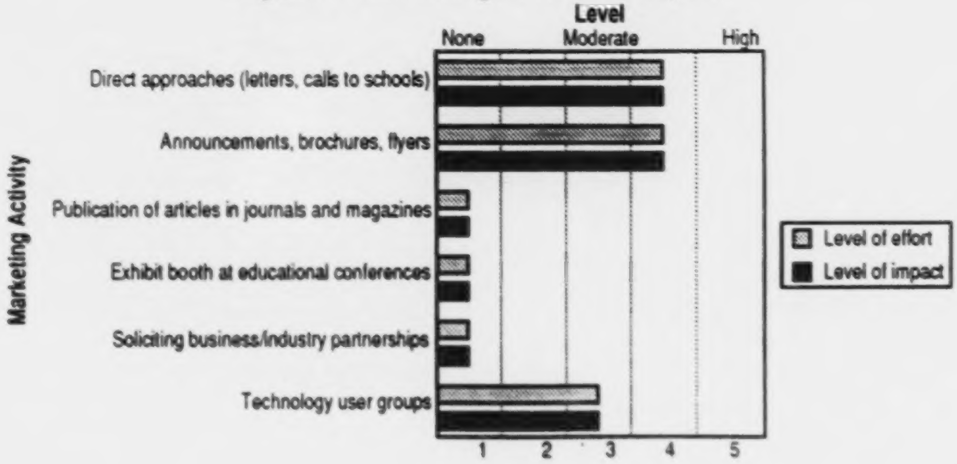


The CTP initiated activities and resources provided during both years of operation that were of greatest benefit to educators were: the workshops, TLA's and the telecommunications workshop. All of these activities assisted in staff development needs of the region.

B. Marketing Effort and Impact

The consortium coordinators were asked to indicate the level of effort devoted to different marketing strategies and to rate the level of impact produced by each activity. Figure 9 shows these ratings for the OCLA Consortium.

Figure 9: Marketing Effort and Impact



C. Cost Benefits

The consortium staff indicate the level of funding was adequate for the CTP Consortium, given the objectives and expectations of the regional CTP. The OCLA consortium would not have been able to achieve as much without the existence of volunteer assistance which would not have occurred without funding. If funding were terminated most services would be discontinued in order to keep all fees reasonable. The OCLA Technology Consortium indicated that the CTP Consortia model is a cost-effective approach to providing regional support services.

VI. Recommendations

The following recommendations were offered by the Consortium Coordinator:

- Southern Los Angeles county needs to form a separate consortium. Currently all the volunteer help is located in Orange County, quite a distance to drive.
- More hands-on training is needed by staff.
- The consortia should receive funding early in the year.
- State CTP support should be continued at current or higher levels.
- The evaluations should take place after programs have been in place a year and not before.

Sacramento Regional Consortium

I. Background Information

The Sacramento Regional Technology Consortium (SRTC) is operated out of the Placer County Office of Education, which serves as its fiscal agent. The consortium began operations in August of 1989 and became fully operational in September of 1989. It serves a geographically defined 10 county region including Sacramento, Placer, Sierra Nevada, Yolo, El Dorado, Yuba and Sutter counties. A $75 fee is charged for each member district.

The consortium has an extensive set of bylaws which outline its service area, purpose, philosophy, governance structure, and finances. The organizational structure includes a Coordinator and an Executive Committee. The consortium maintains a close relationship with the Placer County Office of Education.

II. Planning

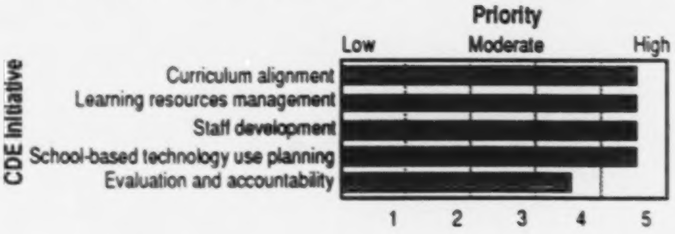
In order to assess the local needs for CTP services, surveys were conducted of consortium members. This was combined with input from CTP council and CTP staff judgement. From the gathering of opinions, it was agreed that the consortium needed to concentrate on the TLAs, and on AB 1470 related matters.

During 1989-90, the consortium estimates that between 26-50 requests were handled for AB 1470 project assistance, school district technology use planning assistance, information about AB 1470 grant guidelines and technology in the curriculum staff development. An estimated 11-25 requests were handled for software/video information and questions, and estimated 6-10 requests for technical assistance with hardware and ITV staff development. About five requests were handled for teleconference information.

In 1990-91, the coordinator estimates that 26-50 requests for AB 1470 project development, assistance, district-level technology use plans, AB 1470 Grant guidelines and technology in the curriculum workshops were handled. In addition, 11-25 software/video requests, six-ten hardware and ITV staff development and less than six teleconference requests were responded to. They also received 40-50 applicants for their TLA.

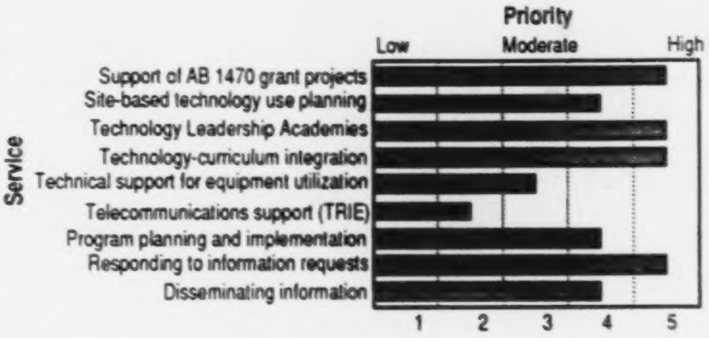
The SRTC has a formal planning group, separate from the CTP council, which develops an annual plan for consortium priorities and activities. Figure 1, below, shows the priorities given to the CDE's initiatives while the plan was being developed.

Figure 1: Priority Given to CDE Initiatives



The consortium plan is used to a great extent as a working document to guide its day-to-day operations. Users of consortium services provide input to the plan by means of consortium council meetings, and informal comments. The planning of activities is coordinated with the existing staff development and technology resources of the Placer County Office of Education to some degree. Figure 2 shows the priorities assigned to the different CTP services in the SRTC's plan.

Figure 2: Service Priorities



III. Program Content and Implementation

A. Implementation of CTP Objectives

The consortium coordinators were asked to indicate the level of implementation or emphasis of each of the fifteen activities and objectives outlined in the agreements that they made with the CTP central office. Figure 3 shows this information for the SRTC.

1989-90
Overall planning and management and the planning and conducting of staff development workshops took up about 50 percent of the Coordinator's time. (An estimated 70 hours spent on these activities during the year). State and local CTP meetings, coordinating with other agencies, developing reports and surveys, promoting TRIE, and supporting SBG projects took up the remaining half. Approximately 130 hours was spent by technical and clerical support on the same activities. Contract consultants were also extremely helpful, offering about 260 hours in overall planning and management, project support and staff development.

Overall Consortium staff time spent on the fifteen activities increased by 40 percent (67 days the first year, 106 days for the 1990-91 year). This increase was in the area of technical/clerical support.

Figure 3: Implementation and emphasis of CTP activities and objectives

CTP Activity/Objective	Level of Implementation or Emphasis					
	Not implemented or emphasized	Not possible to implement of emphasize	Not implemented or emphasized in 89-90 but planned for 90-91	Partial implementation or emphasis	Fully implemented or emphasized	Implemented or emphasized beyond expectations
General administration of the Consortium					✔	
Facilitate exchange of information on uses of technology between and among Consortium and other educational groups					✔	
Support effective uses of technology in support of California Curriculum Frameworks						✔
Ensure that membership, including teachers, have input into governance and planning.					✔	
Send a representative to consortium coordinator's meetings called by the central CTP					✔	
Provide a liaison and coordination between SB 1882 Consortia, County Superintendents, MTS Projects, ITV Agencies, California Subject Matter Projects, and others.						✔
Promote educational telecommunication use of CSUNet and TRIE				✔		
Assist the state-wide CTP in information collection and dissemination activities				✔		
Provide evaluation data to the CTP central office				✔		
Conduct annual needs assessment/resource identification survey to identify training resources and priorities				✔		
Assist AB 1470 School-Based Grants program by conducting orientation workshops and other support services					✔	
Conduct annual regional CTP Technology Leadership Academy					✔	
Conduct locally determined workshops				✔		
Host a downlink site for annual CTP satellite broadcasts as requested				✔		
Submit a "Final Activities Report" to the CTP central office no later than October 15th.					✔	

B. Staff Development

A total of 9 workshops were conducted in 1989-90, including five two-day TLAs and a two day workshop in AB 1470 related procedures A total of 150 educators received training from the SRTC during 1989-90. In the 1990-91 year there were six workshops; five were TLA and one for AB 1470.

The consortium conducted formal evaluations of the TLAs and technology use planning workshops, and evaluation forms were completed by participants near the end of each activity.

Table 1 lists the number of staff development and awareness publications produced by the SRTC during 1989-90.

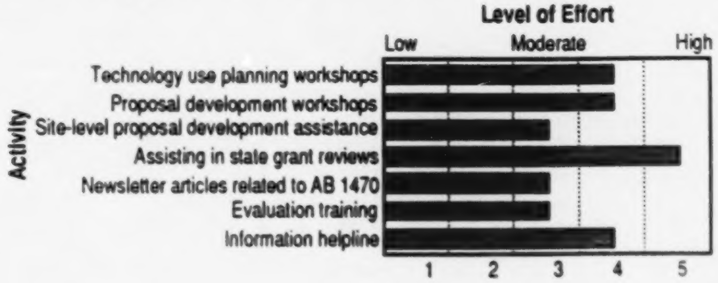
Table 1: Consortium Publications

Publications Produced or Distributed by Project	1989-90		1990-91	
	Number of Publications	Number of Copies Printed	Number of Publications	Number of Copies Printed
Workshop Schedules	0	0	Unknown	200
Consortium Newsletters	2	400	2	400
Announcements, Brochures, Flyers	11	200 each	Unknown	1000

C. AB 1470 Project Support Services

A variety of support services were provided to AB 1470 school-based projects. Figure 4 shows the level of staff effort dedicated to each of the support services provided by the consortium.

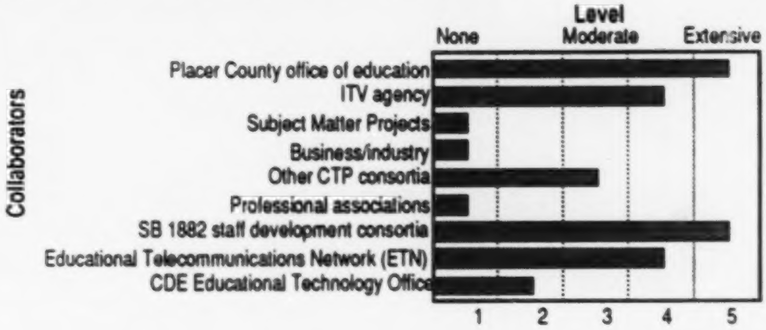
Figure 4: Support for AB 1470 school-based projects



D. Collaboration with Other Agencies

The SRTC collaborated with a variety of other agencies. Several representatives of various County Offices of Education had representation on the Executive Council, as did a business and industry representative. KQED, the local ITV agency, was involved in the local TLA. The Fresno consortia assisted in planning. The ACSA and local CUE professional associations assisted in science teaching. The Coordinator is also a member of the SB 1882 staff consortia and trained for the California State Los Angeles campus, thus there was collaboration between those agencies. Placer county is also a downlink site for Educational Telecommunications Network (ETN). Figure 5 shows the level of collaboration with each of these agencies.

Figure 5: Collaboration with other agencies



IV. Funding Resources and Constraints

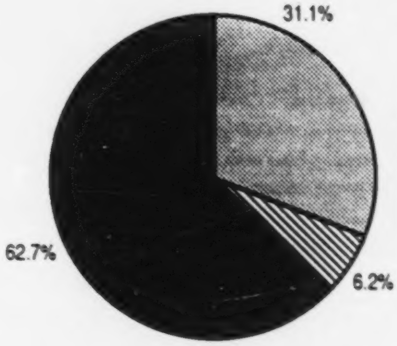
A. Funding Support

1989-90
The SRTC received $14,420 in direct cash revenue. Approximately 50 percent of staff time was funded by the CTP grant, 30 percent from the host agency and 20 percent of staff time was donated by volunteers and 28 percent funded by the districts.

An estimated $25,000 was received from in-kind support. About $15,000 was received (for example, in the director's time) from the Fiscal Agent. Approximately $3,000 worth of support was received from the county office of education in the form of consultants. Approximately $4,000 of in-kind support from the school districts, $1,000 each from other CTP consortia and colleges and universities.

1990-91
The SRTC received $7,680 in direct cash revenue, $2,496 on memberships and the rest in grants. An estimated $12,700 was received from in-kind support. About $7,000 was received for staff time, space for meetings and equipment from the Fiscal Agent. Approximately $1,500 worth of support was received from the county office of education in the form of staff time and meeting space. Approximately $3,500 of in-kind support from the school districts for equipment, space and administrative time, $300 each from colleges and universities, and $400 from ITV agencies.

Figure 6: Revenue Sources



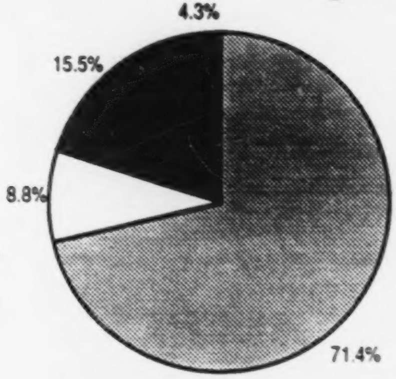
Source	1989-90	1990-91
▒ State AB 1470 funds	$12,420	Unknown
▨ Other	$2,475	$7,680
■ In-kind support	$25,000	$12,700
Total	$29,895	-

B. Consortium Expenditures

1989-1990
The SRTC's total expenditures were $18,734. The total amount reimbursed to the Placer County Office of Education was $10,308. This left a negative balance of $4,416 associated with the consortium's operations.

1990-91
The SRTC's total expenditures were $27,800. This left a negative balance of $20,120 associated with the consortium's operations. See Figure 7 for consortium expenditures.

Figure 7: Consortium Expenditures



Expenditure	1989-90	1990-91
▒ Staff	$13,371	$10,163
☐ Materials/supplies	$1,652	$0
■ Contract services/ expenses	$2,910	$7,877
■ Indirect costs	$800	$2,080
Total	$18,734	$27,800

C. Supporting and Impeding Factors

The factor that most noticeably facilitated the delivery of services was support from the fiscal agent which kept the consortium going on faith with their own funds for eight months in the 1989-90 year. The county office of education, it was noted, facilitated the entire endeavor. The host agency was also extremely supportive and the staff and consultants were very cooperative. Also facilitative were the technology manufacturers and vendors who were very cooperative Recruiting districts and schools for membership also helped as did the consortiums capabilities for producing and distributing CTP publications.

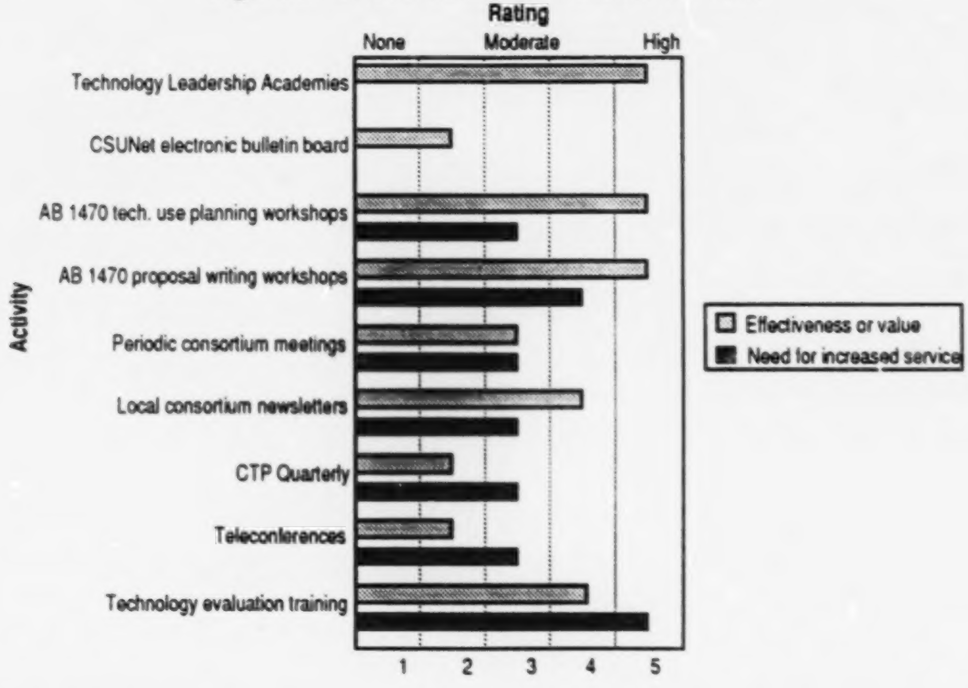
The factors that most impeded delivery included the very large geographic rural service area, the CTP central office and the CDE. The coordinator notes that the TRIE communications were not effective due in part to all the junk mail received and budgeted funds were slow to materialize impeding factor. The insufficient fee structure was also cited as being impeding.

V. Outcomes

A. Impact of Services

The coordinators were asked to rate the effectiveness or value to participants of each service that was offered and to rate the need for increased service in that area. Surveys of participants were used to obtain the ratings for staff development services while comments and staff perception were used to rate the others. Figure 8 shows the effectiveness and need for services.

Figure 8: Effectiveness and need for services

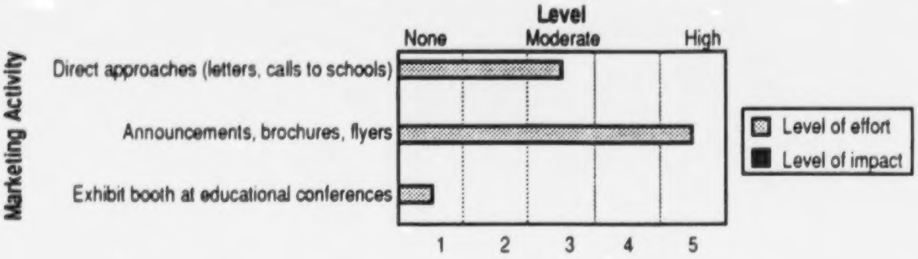


The CTP initiated activities and resources provided during 1989-90 that were of greatest benefit to educators were: the TLAs and AB 1470 Technology use. Both of these activities helped the curriculum and directly affected the students.

B. Marketing Effort and Impact

The consortium coordinators were asked to indicate the level of effort devoted to different marketing strategies and to rate the level of impact produced by each activity. Figure 9 shows these ratings for the SRTC. It was noted in the 1990-91 survey that marketing was not an initial goal yet needs to be addressed in a more goal-oriented manner.

Figure 9: Marketing Effort and Impact



C. Cost Benefits

The consortium staff state that the funding support for meeting the objectives and expectations of the CTP was somewhat insufficient. The consortium would not have been able to achieve what they had without the existence of in-kind funding and volunteer assistance. The coordinator noted that funding was insufficient to do as much as they would have liked and was very late. If funding were terminated, the CTP would have to discontinue most services and would operate in a very limited way as a clearing house for information. They do report that the CTP Consortia model is a cost-effective approach to providing regional support services.

VI. Recommendations

The following recommendations were offered by the Consortium Coordinator:

- Service regions should be aligned with existing county superintendent service regions.
- The CTP Director should be appointed by the consortia coordinators, just as those coordinators are appointed by their executive committees.
- AB 1470 funding should be increased. It was delayed and is very disappointing when it is played off against Proposition 98 Supplemental Grant funds.
- More funds need to be directed to the regional consortia.
- There should be more push from the state Educational Technology staff for California Subject Matter Projects and for SB 1882 to involve technology.
- The state expectations for CTP Consortia are unrealistic for the small amount of fiscal and technical support. Either they need to increase funding or decrease expectations.

San Diego County School Districts' Technology Consortium

I. Background Information

The San Diego County School Districts' Technology Consortium is operated out of the San Diego County Office of Education (SDCOE), which serves as its fiscal agent. The Consortium began operations in July of 1989 and became fully operational in September of 1989 and serves San Diego County. The Consortium began offering services to Imperial County in 1990-91. In both years, a $0.20 per average daily attendance fee was charged for membership in the Consortium.

The Consortium bylaws outline its service area, purpose, philosophy, governance structure, and finances. The organizational structure includes a manager, and two coordinators. In 1990-91 the Consortium added business and industry supporting memberships, Institute of Higher Education associate memberships, individual teacher memberships and individual school memberships of non-district members. All can attend Consortium meetings but do not have voting privileges. A close relationship is maintained between the San Diego Consortium and the county office.

II. Planning

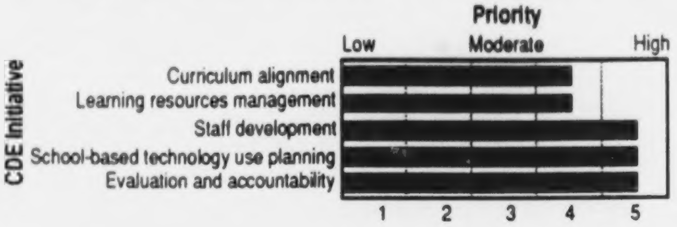
In order to assess the local needs for CTP services, surveys were conducted of teachers, administrators, and Consortium members. Input from the CTP council and the judgement of the Consortium staff were also used to set priorities for services. The needs most often suggested by the surveys were staff development, technology use planning, the development of funding sources to assist in purchase of hardware and software and multimedia training.

For each year, (1989 and 1990-91) over 100 requests were received by the Consortium for software video information and questions, technical assistance with hardware and professional productivity hands-on workshops. Between 51-100 requests were handled for information about AB 1470 Grant Application Guidelines. The Project Coordinators estimate that between 26-50 requests were handled for the following services: project development assistance (AB 1470), technology use planning assistance, and technology in the curriculum staff development. There were eleven to twenty-five requests for teleconference information and ITV staff development.

In 1990-91 the Consortium handled more requests for AB 1470 project assistance and school-district based technology use planning assistance.

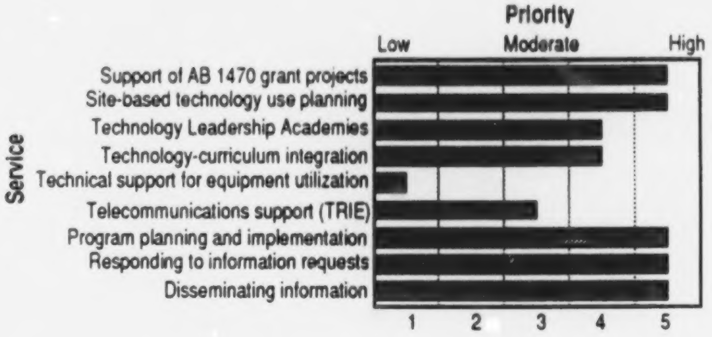
The San Diego Consortium has a formal planning group, separate from the CTP council, which develops an annual plan for Consortium priorities and activities. Figure 1, on the following page, shows the priorities given to the CDE's initiatives while the plan was being developed. The highest priorities were in technology use planning evaluation and staff development. Moderate priorities were given to learning resources management and curriculum alignment.

Figure 1: Priority Given to CDE Initiatives



The Consortium plan is used to a great extent as a working document to guide its day-to-day operations. Users of Consortium services provide input to the plan by means of surveys, Consortium council meetings, and informal comments. The planning of activities is extensively coordinated with the existing staff development and technology resources of the San Diego County Office of Education. Figure 2 shows the priorities assigned to the different CTP services in the San Diego Consortium's plan.

Figure 2: Service Priorities



III. Program Content and Implementation

A. Implementation of CTP Objectives

The Consortium coordinators were asked to indicate the level of implementation or emphasis of each of the fifteen activities and objectives outlined in the agreements that they made with the CTP central office. Figure 3, on the following page, shows this information for the San Diego Consortium.

The coordinator estimated that 25 percent of time spent was for overall planning and management; 25 percent for AB 1470 support; 12 percent on staff development; 12 percent on reports; 12 percent hardware/software support and 12 percent on TRIE, coordination with other agencies and state and local meetings. The Consortium's technical and clerical support systems spent about the same amount of time on the same activities The same time breakdown applied to the 1990-91 year . The Consortium anticipated an inability to fund both half-time coordinator in 1991-92 due to unsure CTP funding. This may result in program cutbacks and reshuffling of job responsibilities.

Figure 3: Implementation and emphasis of CTP activities and objectives

	Level of Implementation or Emphasis					
CTP Activity/Objective	Not implemented or emphasized	Not possible to implement of emphasize	Not implemented or emphasized in 89-90 but planned for 90-91	Partial implementation or emphasis	Fully implemented or emphasized	Implemented or emphasized beyond expectations
General administration of the Consortium					✓	
Facilitate exchange of information on uses of technology between and among Consortium and other educational groups						✓
Support effective uses of technology in support of California Curriculum Frameworks					✓	
Ensure that membership, including teachers, have input into governance and planning.					✓	
Send a representative to consortium coordinator's meetings called by the central CTP					✓	
Provide a liaison and coordination between SB 1882 Consortia, County Superintendents, MTS Projects, ITV Agencies, California Subject Matter Projects, and others.				✓		
Promote educational telecommunication use of CSUNet and TRIE				✓		
Assist the state-wide CTP in information collection and dissemination activities					✓	
Provide evaluation data to the CTP central office				✓		
Conduct annual needs assessment/resource identification survey to identify training resources and priorities					✓	
Assist AB 1470 School-Based Grants program by conducting orientation workshops and other support services					✓	
Conduct annual regional CTP Technology Leadership Academy					✓	
Conduct locally determined workshops					✓	
Host a downlink site for annual CTP satellite broadcasts as requested					✓	
Submit a "Final Activities Report" to the CTP central office no later than October 15th.					✓	

B. Staff Development

A total of seventeen workshops were conducted in 1989-90, including two 1-2 day workshops on AB 1470 writing and planning workshops. Other workshops included: telecomputing/telecommunications, DTP media/multimedia, Labquest, CNN Newsprogram in-service, interactive video production, hands-on trouble shooting PC repair, learning resources management, ITV, CSBA Gamut and Mac training. The San Diego Consortium also held two Technology Leadership Academies (TLA) both lasting 1-2 days; one was science and one language arts. A total of 570 educators received training from the San Diego Consortium during 1989-90.

In 1990-91 they added many more workshops including a TLA in history and social studies, hypercard, multimedia Apple and IBM networking, Labquest, and a 13 session administrative technology academy.

The Consortium conducted formal evaluations of the technology leadership academies, the technology use planning workshops, AB 1470 proposal writing workshops, other AB 1470 project assistance, Consortium publications, telephone assistance, and technology needs assessment. The evaluation forms are routinely completed by all workshop and academy participants. An overall tech Consortium evaluation form was distributed to and collected from Consortium members. A needs assessment of Consortium members was conducted in 1989-90 and again in 1990-91 to allow the Consortium to better identify and respond to members needs.

Table 1 lists the number of staff development and awareness publications produced by the San Diego Consortium during 1989-90.

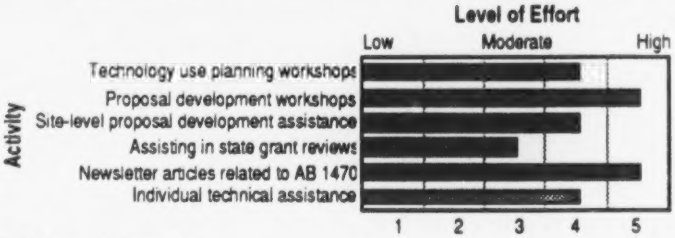
Table 1: Consortium Publications

Publications Produced or Distributed by Project	1989-90		1990-91	
	Number of Publications	Number of Copies Printed	Number of Publications	Number of Copies Printed
Workshop Schedules	8	16,000	18	85,000
Consortium Newsletters	0	0	4	8,750
Announcements, Brochures, Flyers	5	1,000	9	3,000
San Diego County List of Classes Offered	1	500	0	0

C. AB 1470 Project Support Services

A variety of support services were provided to AB 1470 school-based projects. Figure 4 shows the level of staff effort dedicated to each of the support services provided by the Consortium. The highest levels of effort were for technology use workshops, proposal development workshops and newsletter articles related to AB 1470.

Figure 4: Support for AB 1470 school-based projects

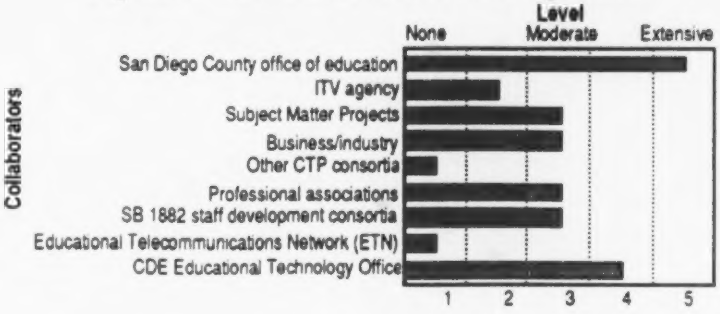


D. Collaboration with Other Agencies

The San Diego Consortium collaborated with a variety of agencies during the implementation of their plan. The county office of education was especially helpful in its role as the fiscal agent for the Consortium, The California Department of Education Educational Technology Unit offered assistance by attending meetings and disseminating information to members. The SB 1882 staff development consortia worked with the SDCOE staff development staff.

CUE co-sponsored an Apple purchase, business and industry assisted in providing user training and exposing users to hardware software solutions for their sites. The SDCOE also collaborated with ITV agencies and with the California Subject Matter Projects during their TLAs. In 1990-91 further assistance was received from professional associations (CUE, ACSA, and CTA) There was also an increased level of support from business and industry. Figure 5 shows the level of collaboration with other agencies.

Figure 5: Collaboration with other agencies



IV. Funding Resources and Constraints

A. Funding Support

Total revenue for the first year was $133,000. The 1990-91 year reported an increase to $156,000.

1989-90
The San Diego Consortium received $26,000 from state AB 1470 CTP funds, $5,000 in workshop fees, $32,000 in membership fees and $25,000 from state lottery funds. This results in a total direct cash revenue was $88,000. About 30 percent of staff time was funded by the CTP grant, 28 percent was funded by the host agency and 36 percent was funded by member districts. There was no volunteer time recorded.

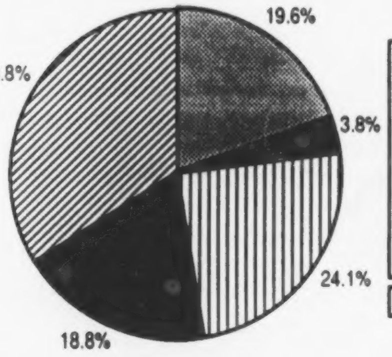
The Consortium also received approximately $45,000 from in-kind support. The host agency offered approximately $35,000 in the form of a half-time manager and office space to house technology Consortium staff. School districts gave about $2,500 worth of staff time to serve as presenters and trainers at workshops. The CTP offered approximately $5,000 in CTP and CDE updates. Business and industry provided personnel as workshop presenter/trainers at an estimated value of $2,500.

1990-91
As of June, 1991 the Consortium had received no monetary support from state AB 1470 CTP funds. Funds reported include $20,000 in workshop fees, $33,000 in membership fees and $25,000 from state lottery funds. Total direct cash revenue was $83,500. Thirty percent of staff time was funded by the host agency, 35 percent was funded by member districts and volunteer time represented 35 percent of staff time.

The Consortium also received approximately $92,500 from in-kind support. The host agency offered approximately $35,000 in the form of a half-time manager and office space to house technology Consortium staff. School districts gave about $2,500 worth of staff time to serve as presenters and trainers at workshops. The CTP offered approximately $5,000 in CTP and CDE updates. Business and industry increased their contribution to $50,000 that provided hardware and software along with personnel for workshops

Anticipated changes for 1991-92 include a 2,000 square foot facility for a training/demo by the San Diego County Office of Education. Additional business/industry support is also expected. See Figure 6 for revenue sources.

Figure 6: Revenue Sources

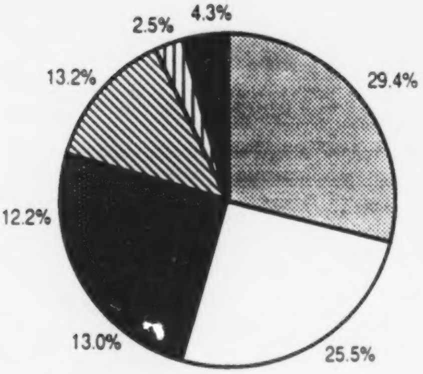


Source	1989-90	1990-91
▩ State AB 1470 funds	$26,000	$0
■ Workshop fees	$5,000	$20,000
▥ Membership fees	$32,000	$33,000
■ SD COE Lottery funds	$25,000	$25,000
▨ In-kind support	$45,000	$92,500
Total	$133,000	$156,000

B. Consortium Expenditures

The San Diego Consortium's total expenditures for 1989-90 were $73,505 including staff time, clerical support, equipment, services, and supplies donated by the SDCOE and other agencies and individuals. In 1990-91 the expenditures increased to $117,335 because clerical staff was not hired until February of 1990. See Figure 7 for consortium expenditures.

Figure 7: Consortium Expenditures



Expenditure	1989-90	1990-91
▒ Professional staff	$21,580	$55,000
☐ Support staff	$18,733	$19,876
■ Staff Benefits	$9,551	$16,287
■ Materials/supplies	$8,932	$16,372
▨ Contract services/ expenses	$9,688	$8,950
▥ Indirect costs (7.39%)	$1,800	$2,595
■ Technology hardware	$3,221	$1,663
Total	$73,505	$117,335

C. Supporting and Impeding Factors

The factor that most noticeably facilitated the delivery of services was support from the SDCOE and other county offices in the region. They offered a half time manager, lottery fund support, and a facility to house the Consortium staff. Also extremely helpful were technology manufacturers and vendors who donated hardware, software , personnel as presenters and trainers for workshops. One-third of financial support came from membership fees, thus they were a facilitating factor. Other facilitating factors included: the Consortium capabilities for producing and distributing CTP publications, the availability of CSUNet, availability of staff and consultants to provide professional development, colleges and universities, and interaction with the CTP central office.

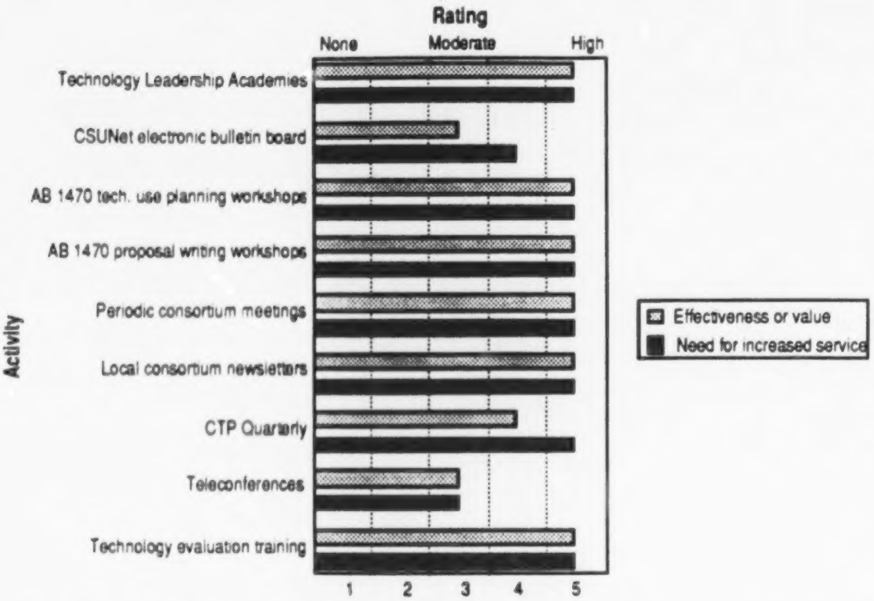
Impeding factors included recruiting districts or schools for membership, which took time away from providing services to Consortium members. The geographic size of the service area also impeded implementation by not allowing rural school staffs to attend many workshops.

V. Outcomes

A. Impact of Services

The coordinators were asked to rate the effectiveness or value to participants of each service that was offered and to rate the need for increased service in that area. Surveys of participants were used to obtain the ratings for staff development services while comments and staff perception were used to rate the others. Figure 8 shows the effectiveness and need for services.

Figure 8: Effectiveness and need for services

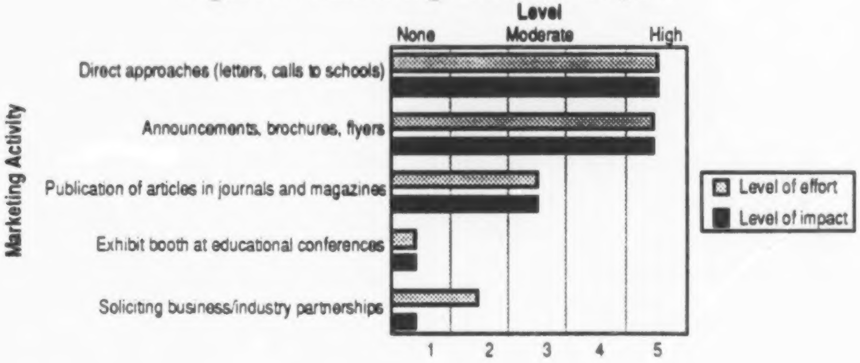


The CTP initiated activities and resources provided during 1989-90 that were of greatest benefit to educators were: AB 1470 proposal writing workshops and technology use planning workshops. San Diego county applicants received outstanding percentage of AB 1470 grants. The workshops were rated high by the Consortium members. The TLA's allowed members to be exposed to latest instructional technology. In 1990-91 the Administrators Technology Academy was also rated highly, as it introduced administrators to the possibilities and promise of technology in a non-threatening, collaborative way. The TRINET training workshops were also helpful, they introduce participants to the potential of CSUNet.

B. Marketing Effort and Impact

The Consortium coordinators were asked to indicate the level of effort devoted to different marketing strategies and to rate the level of impact produced by each activity. Figure 9 shows these ratings for the San Diego Consortium. Anticipated changes in the 1991-92 year include increased solicitation of business/industry and Institute of Higher Education partnerships.

Figure 9: Marketing Effort and Impact



C. Cost Benefits

The Consortium found the level of funding from the CTP to be somewhat insufficient to meet the objectives and expectations of the CTP. By 1990-91 they had found the funding to be very insufficient. They found it would have been impossible to achieve what they had without the existence of in-kind funding and volunteer support. Support from business and industry proved invaluable. If funding were cut off they would have to discontinue most services. The coordinator noted that the CTP Consortia model is a cost-effective approach to providing regional support services but the level of services provided definitely depends upon level of funding support. As of May 1991 no 1990-91 funding was received from the CTP. This adversely affected Consortium operations and "cast a cloud over 91-92 plans and operations."

VI. Recommendations

The following recommendations were offered by the Consortium Coordinator:

- Look at more of a regional CTP concept. In this case San Diego, Imperial, Orange, Riverside and San Bernardino counties in addition to the present service region.
- Offer more professional productivity hands-on workshops for teachers and administrators.
- CTP consortia, including the state CTP, must look more to business, industry, and technology vendors for additional financial and in-kind support.
- CTP regional consortia need to work more closely to share resources and information.
- More work must be done by state CTP and regional CTP consortia in providing means to evaluate actual impact of technology on student motivation and performance.
- AB 1470 program must coordinate more with other state programs, the state CTP should accumulate and share ideas on how this could be done.
- Coordinator support should be continued by the state CTP.
- Stronger ties are needed with the subject matter project.

The following recommendations were added in 1990-91:

- The state CTP needs to share organizational structures and methods of operation to ensure a teamwork approach to the integration of technology in schools throughout the state.
- Funding must be in the hands of the consortia early in the fiscal year to allow for full program implementations and avoid staffing contractual problems due to extremely late funding.

San Gabriel Valley Educational Technology Consortium

I. Background Information

The San Gabriel Valley Educational Technology Consortium is operated out of the Charter Oak Unified School District, which serves as its fiscal agent. The consortium began operations in October of 1989 and became fully operational the same month. It serves a geographically defined area consisting of two counties: San Bernardino and Los Angeles. The consortium charges a $75 membership for districts, universities, business and county offices and charges individuals $15. The consortium serves approximately 500 schools, 35 districts and 5 colleges and universities.

The consortium has a set of by-laws that define its philosophy, governance structure, and finances. The board consists of the chairs of standing committees. A close relationship is maintained between the San Gabriel Valley Educational Technology Consortium and the county office.

II. Planning

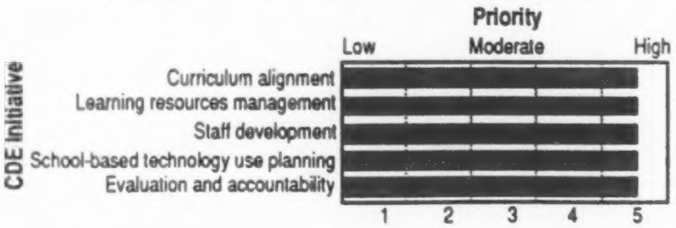
In order to assess the local needs for CTP services, surveys were conducted of teachers, administrators, and consortium members. Input from the CTP council,county office, business and the judgement of the consortium staff were also used to set priorities for services. The three needs most often suggested by the surveys were more workshops, AB 1470 evaluation and implementation and networking.

During 1989-90, over 100 requests were handled for the following CTP services: AB 1470 project development assistance, technology use planning (district level), technical assistance with hardware, software/video information and AB 1470 grant guidelines. Between 26-50 requests were handled for software video information and questions. Eleven to 25 members requested teleconference information and Technology Resources in Education (TRIE) training. Less than six requests were received for technology in the curriculum training.

During 1990-91, an estimated 51-100 requests were handled for the following CTP services: AB 1470 project development assistance, technical assistance with hardware, technology in the curriculum staff development, Instructional Television (ITV) staff development and TRIE training. Between 26-50 requests were handled for software video information and questions. Eleven to 25 members requested teleconference information.

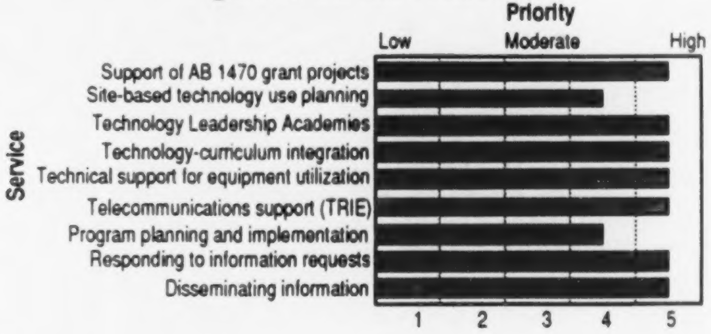
The San Gabriel Valley Consortium has an annual plan, but no formal planning group (separate from the CTP council) which develops an annual plan for consortium priorities and activities. Figure 1, on the following page, shows the priorities given to the CDE's initiatives while the plan was being developed.

Figure 1: Priority Given to CDE Initiatives



The consortium plan is used to a great extent as a working document to guide its day-to-day operations. Users of consortium services provide input to the plan by means of surveys, consortium council meetings, and informal comments. Figure 2 shows the priorities assigned to the different CTP services in the San Gabriel Valley Consortium's plan.

Figure 2: Service Priorities



III. Program Content and Implementation

A. Implementation of CTP Objectives

The consortium coordinators were asked to indicate the level of implementation or emphasis of each of the fifteen activities and objectives outlined in the agreements made with the CTP central office. Figure 3, on the following page, shows this information for the San Gabriel Valley Consortium.

In 1989-90, overall planning and management and the planning took up the greatest amount of time with an estimated 1000 hours (40%) being spent. Conducting of staff development workshops took up an estimated 500 hours (20%). They spent 25 percent of staff time on other activities, such as developing reports and surveys, promoting CSUNet and TRIE. State and local CTP meetings and supporting AB 1470 grant projects and coordinating with other agencies took the remaining 16 percent of their time. These estimates include volunteer time, technical clerical support and contract consultants. The San Gabriel Valley operates as a team and the coordinators found it impossible to categorize the hours.

Overall planning and management and the planning (34%) and conducting of staff development workshops (25%) took up the greatest amount of the Consortium's time in 1990-91 with estimated 1400 hours being spent on these activities during the year. State and local CTP meetings took another 8 percent of the consortiums' time. They spent 25 percent of staff time on other activities, such as coordination with other agencies, developing reports and surveys, promoting TRIE, and supporting AB 1470 grant projects. This time includes volunteer time, technical clerical support and contract consultants. The San Gabriel Valley operates as a team and the coordinators found it impossible to categorize the hours.

Figure 3: Implementation and emphasis of CTP activities and objectives

	Level of Implementation or Emphasis					
CTP Activity/Objective	Not implemented or emphasized	Not possible to implement of emphasize	Not implemented or emphasized in 89-90 but planned for 90-91	Partial implementation or emphasis	Fully implemented or emphasized	Implemented or emphasized beyond expectations
General administration of the Consortium					✓	
Facilitate exchange of information on uses of technology between and among Consortium and other educational groups					✓	
Support effective uses of technology in support of California Curriculum Frameworks					✓	
Ensure that membership, including teachers, have input into governance and planning.					✓	
Send a representative to consortium coordinator's meetings called by the central CTP						✓
Provide a liaison and coordination between SB 1882 Consortia, County Superintendents, MTS Projects, ITV Agencies, California Subject Matter Projects, and others.					✓	
Promote educational telecommunication use of CSUNet and TRIE					✓	
Assist the state-wide CTP in information collection and dissemination activities					✓	
Provide evaluation data to the CTP central office					✓	
Conduct annual needs assessment/resource identification survey to identify training resources and priorities					✓	
Assist AB 1470 School-Based Grants program by conducting orientation workshops and other support services					✓	
Conduct annual regional CTP Technology Leadership Academy					✓	
Conduct locally determined workshops					✓	
Host a downlink site for annual CTP satellite broadcasts as requested					✓	
Submit a "Final Activities Report" to the CTP central office no later than October 15th.		✓				

B. Staff Development

A total of ten workshops were conducted in 1989-90, including three half-day and two full-day AB 1470 technology use planning and grant application workshops, two half-day TRIE training workshops, two history-social science and one English-language arts Teacher Leadership Academy (TLA). The number of educators receiving training from the San Gabriel Valley Educational Technology Consortium during 1989-90 was not reported.

A total of eight workshops were conducted in 1990-91, including one half-day AB 1470 evaluation, three half day TRIE training workshops, one grant writing g seminar and one science TLA. A total of 171 educators received training from the San Gabriel Valley Educational Technology Consortium during 1990-91.

The consortium conducted formal evaluations of the TLAs, AB 1470 project assistance, on-site technical assistance, and telephone assistance.

Table 1 lists the number of staff development and awareness publications produced by the San Gabriel Valley Educational Technology Consortium during 1990-91.

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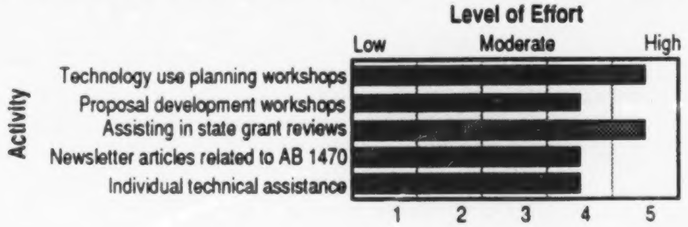
Table 1: Consortium Publications

Publications Produced or Distributed by Project	Number of Publications	Number of Copies Printed
Workshop Schedules	N/A	2,500
Consortium Newsletters		800
Announcements, Brochures, Flyers		2,500

C. AB 1470 Project Support Services

A variety of support services were provided to AB 1470 school-based projects. Figure 4 shows the level of staff effort dedicated to each of the support services provided by the consortium.

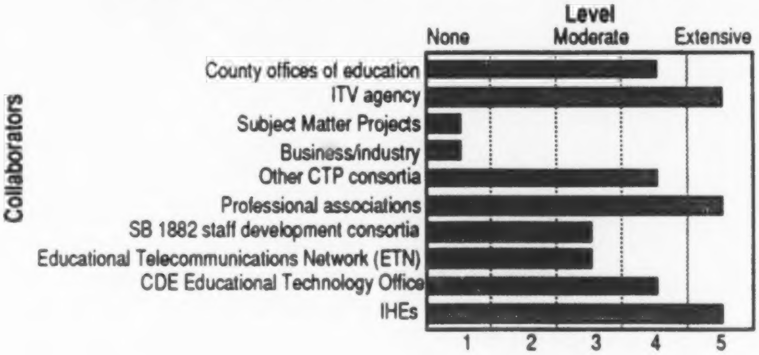
Figure 4: Support for AB 1470 school-based projects 1990-91



D. Collaboration with Other Agencies

The San Gabriel Consortium collaborated with a variety of other agencies. Extensive help was received from the ITV agency which publicized the science TLA and attended meetings. CUE and ACSA also helped greatly as did Cal Poly and Pomona both of whom grant college credit for workshops and publicized the TLA. The County Office of Education helps to some degree by attending meetings as does business and industry. Other CTP Regional consortia help by publicizing each other's events, as do the SB 1882 Staff development consortia. The CDE's Office of Educational Technology was also helpful. In 1991-92 the consortium plans to develop even more links with Cal Poly Pomona and the SB 1882 Staff Development Consortia. Figure 5 shows the level of collaboration with each of these agencies.

Figure 5: Collaboration with other agencies



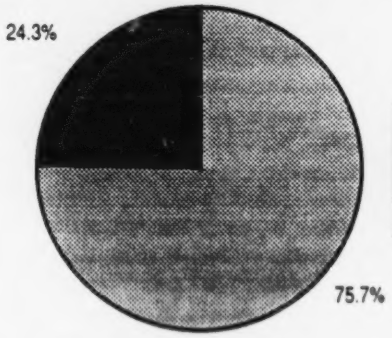
IV. Funding Resources and Constraints

A. Funding Support

In 1989-90, the San Gabriel Valley Consortium received an AB 1470 CTP grant of $27,972. They generated additional revenue of $6,800 from workshop fees and $2,190 from membership fees for a total of $36,962.

The San Gabriel Valley Consortium didn't include the data necessary to determine the sources of their funding for 1990-91, but they did note that approximately 5 percent of staff time is funded by the CTP grant, with the remaining staff time donated by volunteers. They received in-kind support from several sources, including the county office of education which did the mailing, school districts which donated supplies, facilities and downlinks, ITV agencies which gave presentations, Cal Poly Pomona, which gave college credit to staff development participants and provided publicity, and business and industry which loaned software and distributed information See figure 6 for funding sources.

Figure 6: Revenue Sources



Source	Amount
▨ State AB 1470 funds	$27,972
■ Other	$8,990
Total	$36,962

B. Supporting and Impeding Factors

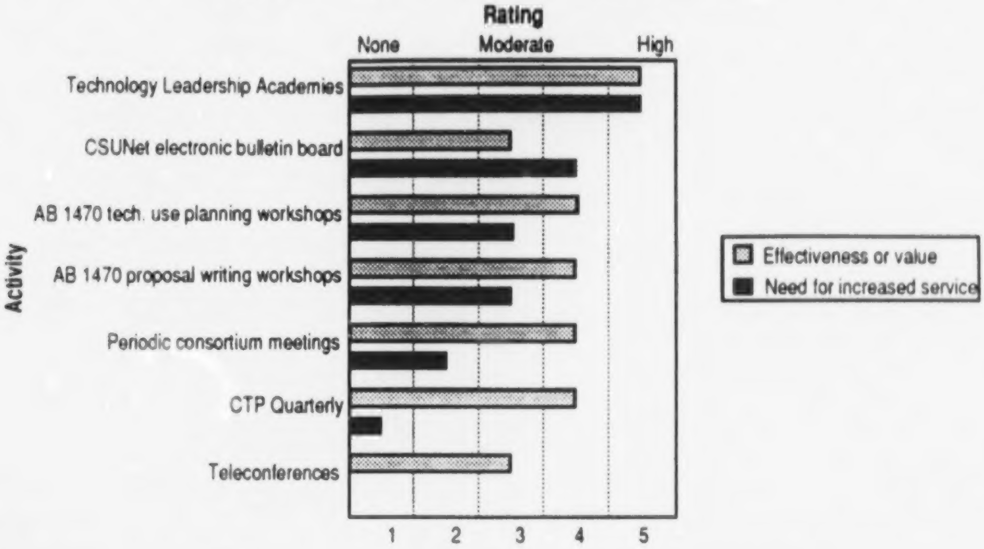
The factor that most noticeably facilitated the delivery of services was support from the CTP central office which helped coordinated, disseminate information and offered support. The consortiums capabilities for producing and distribution. CTP publications also helped as did the availability of TRIE. Also worth noting is the districts' support, the availability of staff and consultants to provide professional development, Cal Poly Pomona, technology manufacturers and vendors, the county office of education, the CDE, and the fiscal agent for the consortium.

V. Outcomes

A. Impact of Services

The coordinators were asked to rate the effectiveness or value to participants of each service that was offered and to rate the need for increased service in that area. Surveys of participants were used to obtain the ratings for staff development services while comments and staff perception were used to rate the others.

Figure 8: Effectiveness and need for services

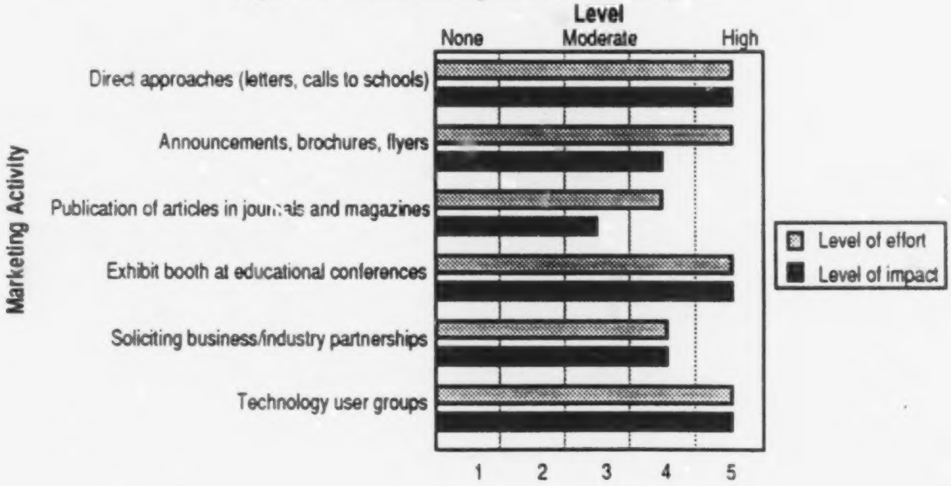


The CTP initiated activities and resources provided during 1989-90 and 1990-91 that were of greatest benefit to educators were the TLA , grant workshops and local meetings. The ratings for the two years were the similar.

B. Marketing Effort and Impact

The consortium coordinators were asked to indicate the level of effort devoted to different marketing strategies and to rate the level of impact produced by each activity. Figure 9 shows these ratings for the San Gabriel Valley Consortium.

Figure 9: Marketing Effort and Impact



C. Cost Benefits

The consortium staff state that their funding level is very insufficient to meet the objectives and expectations of the CTP. They could not have accomplished all they have without in-kind funding and volunteer assistance. The CTP Consortium would have to discontinue most services if funding were terminated. In general, the San Gabriel Valley Technology Consortium indicated the CTP Consortia model is a cost-effective approach to providing regional support services.

VI. Recommendations

The following recommendations were offered by the Consortium Coordinators:

- More emphasis on Technology Leadership Academies is needed.
- More training for telecommunications is needed.
- There should be a more clearly defined link between the SB 1882 Staff Development Consortia and AB 1470.
- There should be more representation on the local level to future Educational Technology planning processes.
- Perhaps southern/northern regional meetings so that the San Gabriel Consortium can communicate with other consortia in their region more effectively and learn what those around us have done or are doing; coordinator's meeting never allow for enough time.
- More financial support is needed in addition to more personnel.
- A longer timeline to prepare for AB 1470 legislative workshops would be helpful.
- More funding is needed to pay coordinator's for their time, as they are essential.

Central Coast Regional Consortium

I. Background Information

The Central Coast Instructional Technology Consortium is operated out of the Cal Poly State University Foundation, which serves as its fiscal agent. The consortium began operations in January of 1990 and became fully operational in February of that same year. The consortium serves three counties, Santa Barbara, San Luis Obispo and Ventura. In 1989-1990 there were no consortium membership fees; however in spring of 1991 the consortium set up a three-tiered fee system: a $50 fee for a school district, community college, university or business organization; a $25 fee for an individual school site; and a $25 fee for an individual associate membership.

The consortium has an extensive set of bylaws which outline its service area, purpose, philosophy, governance structure, and finances. The organizational structure includes an Advisory Committee, Steering Committee and a Curriculum Coordinator. The steering committee consists of one representative from each county and a representative from the host agency. The host agency considers itself an integral part of the consortium.

II. Planning

In order to assess the local needs for CTP services, surveys were conducted of consortium members, teachers in the area, and administrators. Input from the CTP council and the judgement of the consortium staff were also used to set priorities for services. The need most often suggested by the surveys was staff development, including hands on hardware training, and the adaptation of software into the curriculum.

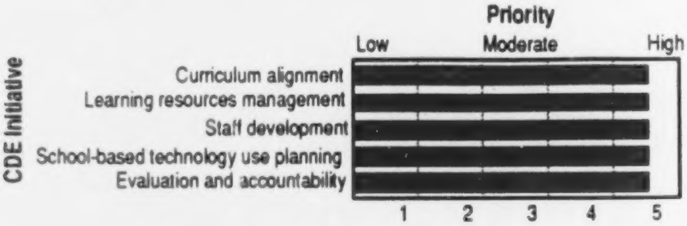
During 1989-90, over 100 requests were received by the consortium for AB 1470 School-Based Grant project guideline information, technical assistance with hardware and technology in the curriculum staff development. The coordinator estimates that between 51-100 requests were handled for project development assistance, software/video information and questions and teleconference information. Finally an estimated 11-25 requests were handled for technology use planning assistance on the school district level.

During 1990-91, over 100 requests were received for technology use planning assistance, information on software/video, technical assistance with hardware, AB 1470 grant application assistance, and information on technology in the curriculum staff development. Between 51-100 requests were received for project development assistance, ITV staff development information, and information on distance learning. Between 26-50 requests were received for teleconference information.

The Central Coast Consortium has a formal planning group, separate from the CTP council, which develops an annual plan for consortium priorities and activities. They plan and coordinate significantly with the CDE initiatives, including curriculum alignment, learning resources management, staff development, school-based technology use planning and evaluation and accountability. The consortium plan is used as a working document to guide the day-to-day implementation of the project, and the consortium's services provide input to the annual plan by providing evaluation and survey services and by attending meetings. The planning of consortium activities is coordinated to a great degree with those of the host agency staff, these activities include staff development and technology resources.

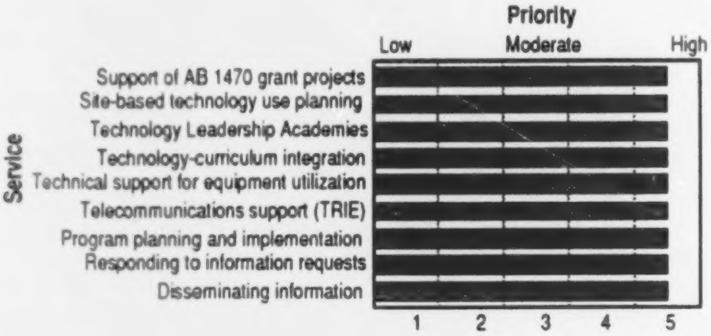
Figure 1, on the following page, shows the priorities given to the CDE's initiatives while the plan was being developed.

Figure 1: Priority Given to CDE Initiatives



Of the major educational and program priorities in the Central Coast Consortium, during 1989-1990 highest priority is given to support of AB 1470 grant projects, technology leadership academies, technology-curriculum integration, technical support for equipment utilization, program planning and implementation, responding to information requests and the dissemination of information. Site-based technology use planning and telecommunications support (TRIE) are also given high priority. The plan was used significantly in the day-to-day implementation. Figure 2 shows service priorities.

Figure 2: Service Priorities



III. Program Content and Implementation

A. Implementation of CTP Objectives

The consortium coordinators were asked to indicate the level of implementation or emphasis of each of the fifteen activities and objectives outlined in the agreements that they made with the CTP central office. Figure 3 shows this information for the Central Coast Consortium.

In 1989-90, the coordinator spent approximately 40 hours (34%) a month on overall planning and management, 12 hours (11%) at CTP state and local council meetings, 10 hours (10%) coordinating with other agencies, 10 hours (10%) dealing with reports and surveys, 15 hours (14%) on CSUNet and TRIE, 20 hours (17%) on AB 1470 project support and 10 hours (10%) on AB 1470 selection. As the evaluation covered approximately six months, the total hours spent on CTP activities by the coordinator was over 600 and represents 32 percent of the staff time dedicated to the consortium. Approximately 11 percent of staff work was by the technical clerical support in the same areas. Over 50 percent of the amount of hours spent were by the members of the steering committee and the members of the TLA. In addition, Central Valley is currently attempting to form a committee of curriculum specialists who can assist with specific areas of the curriculum.

During 1990-91, the coordinator spent approximately 480 hours on overall planning and management, 400 hours on AB 1470 project support, 210 hours coordinating with other agencies, 144 hours at CTP state and local meetings, 120 hours at staff development workshops, and 100 hours on reports and surveys. Other support staff contributed a total of 2,200 hours performing similar tasks.

The Central Coast Consortium conducted formal evaluations of the impact of the following services or activities: TLAs, technology use planning workshops, AB 1470 proposal writing workshops, and other AB 1470 project assistance as well as on-site technical assistance.

Figure 3: Implementation and Emphasis of CTP Activities and Objectives

	Level of Implementation or Emphasis					
CTP Activity/Objective	Not implemented or emphasized	Not possible to implement or emphasize	Not implemented or emphasized in 89-90 but planned for 90-91	Partial implementation or emphasis	Fully implemented or emphasized	Implemented or emphasized beyond expectations
General administration of the Consortium						✓
Facilitate exchange of information on uses of technology between and among Consortium and other educational groups						✓
Support effective uses of technology in support of California Curriculum Frameworks						✓
Ensure that membership, including teachers, have input into governance and planning.						✓
Send a representative to consortium coordinator's meetings called by the central CTP						✓
Provide a liaison and coordination between SB 1882 Consortia, County Superintendents, MTS Projects, ITV Agencies, California Subject Matter Projects, and others.						✓
Promote educational telecommunication use of CSUNet and TRIE						✓
Assist the state-wide CTP in information collection and dissemination activities						✓
Provide evaluation data to the CTP central office						✓
Conduct annual needs assessment/resource identification survey to identify training resources and priorities						✓
Assist AB 1470 School-Based Grants program by conducting orientation workshops and other support services						✓
Conduct annual regional CTP Technology Leadership Academy						✓
Conduct locally determined workshops						✓
Host a downlink site for annual CTP satellite broadcasts as requested						✓
Submit a "Final Activities Report" to the CTP central office no later than October 15th.						✓

B. Staff Development

1989-90
The Central Coast Curriculum conducted 10 one-half to one full day workshops on AB 1470. These workshops were conducted in three different locations for the convenience of consortium members. There were also three TLA workshops for AB 1470 school sites: one was an English/Language Arts and two were History/Government. Approximately 400 consortium members participated in the 13 workshops.

1990-91
Twenty-five workshops were held during 1990-91. Four lasted a half-day, Four were of 2-5 day's length, and the rest lasted 1-2 days. Five TLA workshops were conducted, and eight AB 1470 program review workshops were held.

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Table 1 lists the number of staff development and awareness publications produced by the Central Coast Consortium during 1990-91.

Table 1: Consortium Publications

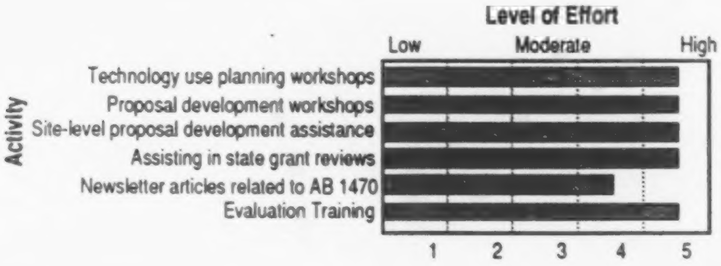
Publications Produced or Distributed by Project	Number of Publications	Number of Copies Printed
Workshop Schedules	10	8,000
TRIE Booklets	70	7,000
Announcements, Brochures, Flyers	20	16,000

C. AB 1470 Project Support Services

A variety of support services were provided to AB 1470 school-based projects. A high level of staff effort was dedicated to technology use planning workshops, proposal development workshops, site-level proposal development assistance, and assistance in state grant reviews. A moderate level of effort was dedicated to newsletter articles relating to AB 1470 and to school-based grant evaluation training.

A variety of support services were provided to AB 1470 school-based projects. Figure 4 shows the level of staff effort dedicated to each of the support services provided by the consortium.

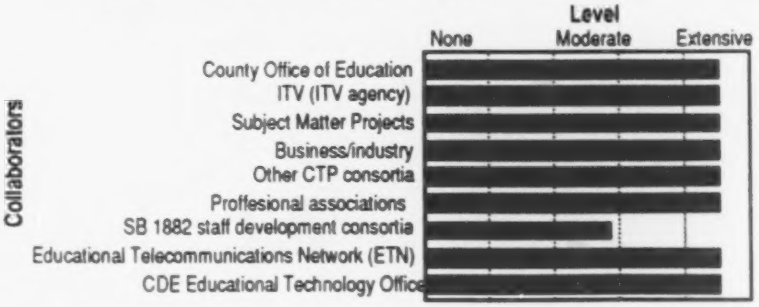
Figure 4: Support for AB 1470 school-based projects



D. Collaboration with Other Agencies

The Central Coast Consortium collaborated with a variety of other agencies during 1989-90. Extensive help was received form the County Offices of Education, each of which has a voting member on the steering committee. The ITV agencies also collaborated, downloading conferences and making videos available to members of the consortium. The Santa Barbara Industry Association also collaborated with Central Coast as did other regional consortia who offered the use of newsletters and informational flyers. Central Coast also co-sponsored events with Computer-Using Educators (CUE) and had the steering committee attend the CUE conference. The Educational Telecommunications Network (ETN) assisted through its conference in Pomona, and Central Valley found the California Department of Education Educational Technology Unit to be of use. In 1990-91, there was extensive collaboration with the County Office of Education, ITV agencies, Subject Matter Projects, business and industry, other CTP consortia, professional associations, ETN, and the CDE Educational Technology Unit. There was also moderate collaboration with SB 1882 Staff Development Consortia. Figure 5 shows the level of collaboration with other agencies.

Figure 5: Collaboration with other agencies



IV. Funding Resources and Constraints

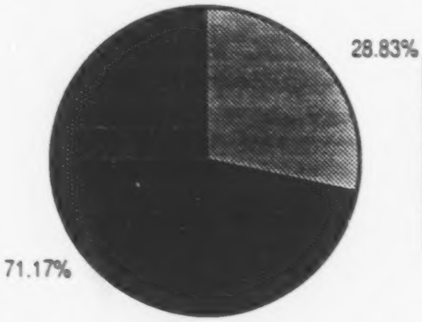
A. Funding Support

1989-90
The Central Coast Consortium operated within a budget of $29,700 between 1989 to 1990. While the total breakdown of the sources of these funds was not available, $3,045 was recovered in workshop fees and $2,000 was donated by the California Faculty Association.

An estimated $48,250 was received from in-kind support from a variety sources. The Fiscal Host offered approximately $3,000 of in-kind support in the form of office space and individual help. The County office of Education offered about $1,500 of staff support, the Santa Barbara School District also offered office space. Other CTP Consortia donated publications, the CTP Central Office offered a TRIE seminar. The California Faculty Association provided approximately $3,000 in computer, modem, supplies and software. Time provided by individuals including the coordinator, steering committee and TLA's was estimated being worth $16,000.

1990-91
The consortium's operating budget during 1990-91 was $29,700. In-kind support was estimated to be $73,300, and came from various sources. The Fiscal Host donated $10,000 in the form of office space and individual time. The county office of education offered staff support valued at $9,000. The equivalent of $10,000 was donated by the school district, and the CTP donated $900. See Figure 6 for revenue sources.

Figure 6: Revenue Sources

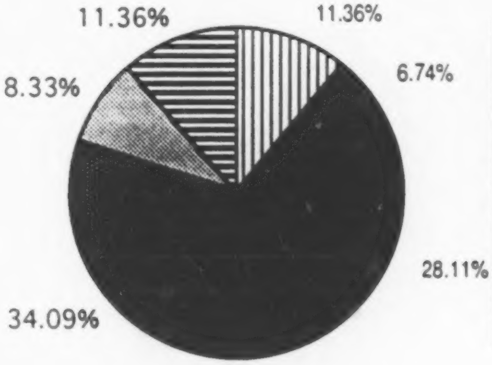


Source	1989-90 Amount	1990-91 Amount
▨ State AB 1470 funds	$29,700	$29,700
■ In-kind support	$48,250	$73,300
■ Other	$5,045	N/A
Total	$82,995	$103,000

B. Consortium Expenditures

Data for 1989-90 was not submitted. The consortium's total expenditures for 1990-91 were $29,700, including staff time, clerical support, equipment, services, and supplies. See Figure 7 for consortium expenditures.

Figure 7: Consortium Expenditures



	Expenditure	1989-90	1990-91
▨	Professional staff	$21,580	$3,500
■	Support staff	$18,733	$2,780
■	Materials/supplies	$8,932	$7,420
■	Contract services/ expenses	$9,688	$9,000
▥	Indirect costs (7.39%)	$1,800	$2,200
▤	Technology hardware	$3,221	$3,000
	Total	$73,505	$29,700

C. Supporting and Impeding Factors

The factors that most noticeably facilitated the delivery of services during 1989-90 included the County Office of Education and the availability of CSUNet. Other factors that moderately facilitated the delivery of services included: interaction with the CTP central office, Cal Poly State University, availability of staff and consultants to provide professional development, and the capabilities for producing and distributing CTP publications. Of slight use was the CDE and the technology manufacturers and vendors. Impeding factors included the geographic size of the service area, business and industry.

Major facilitating factors during 1990-91 were the geographic size of the service area, interaction with the CTP central office, the consortium fiscal agent, the county office of education, colleges and universities, business and industry, host agency support, availability of staff and/or consultants to provide professional development, and the availability of CSUNet. Moderate facilitating factors were technology manufacturers and vendors, and capabilities for producing and distributing CTP publications. The CDE and membership fees were listed as slightly facilitating factors. The time and effort required to recruit districts or schools for membership and lack of office space were seen as major impediments to service delivery.

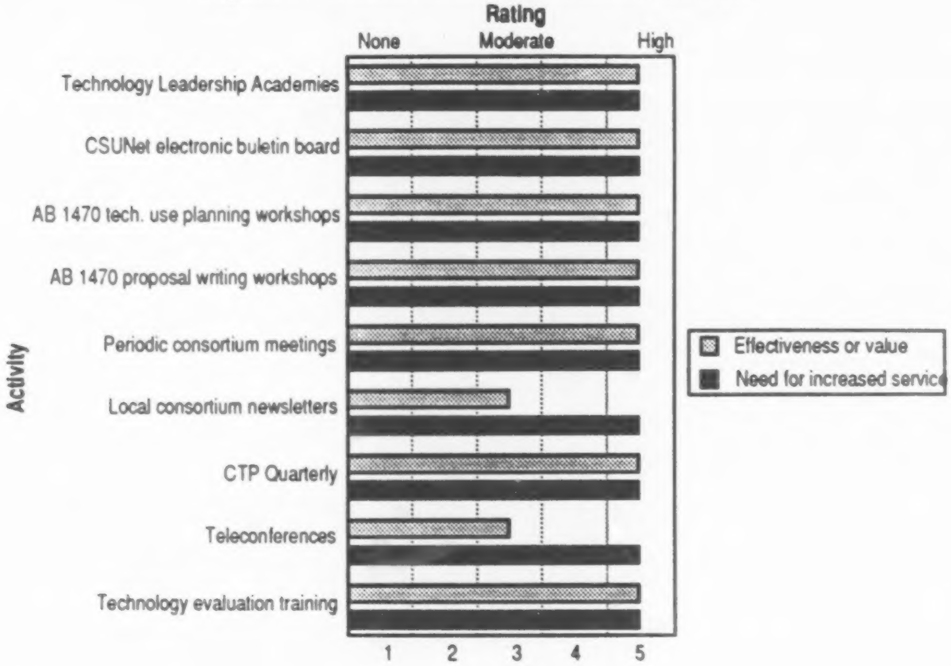
V. Outcomes

A. Impact of Services

The coordinators were asked to rate the effectiveness or value to participants of each service that was offered and to rate the need for increased service in that area. Some of the results were gathered from a survey of users and others were based on informal comments, testimony and the general perception. The results obtained by survey show that a high value was placed on technology leadership academies, AB

1470 technology use planning, AB 1470 proposal writing workshops, and the technology evaluation training. On the basis of informal comments, testimony and the coordinators opinion, high value is placed on the TRIE electronic bulletin board, the CTP Quarterly and teleconferences. Based on the same criteria, moderate value is placed on periodic consortium meetings and local consortium newsletters. See Figure 8 for effectiveness and need for services.

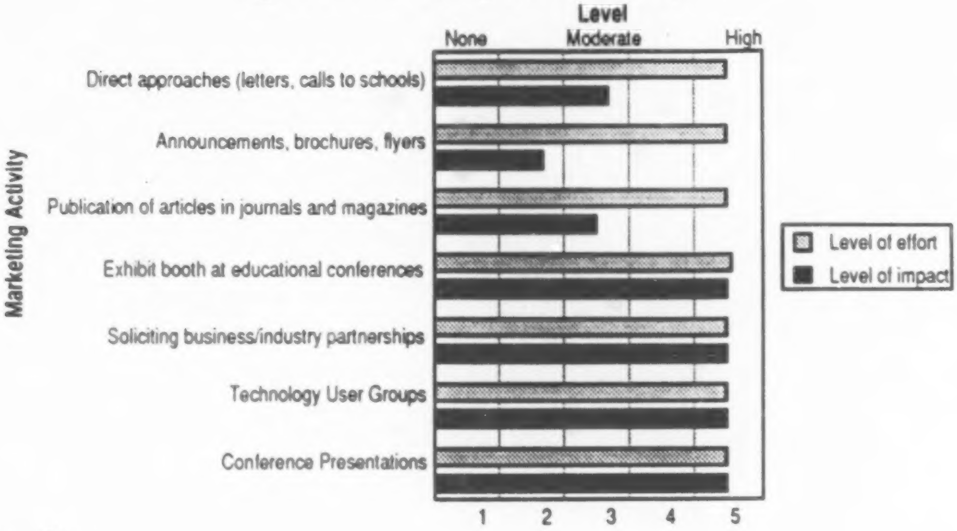
Figure 8: Effectiveness and need for services



B. Marketing Effort and Impact

The consortium coordinators were asked to indicate the level of effort devoted to different marketing strategies and to rate the level of impact produced by each activity. A high level of effort was devoted to every marketing activity surveyed. The ones with the highest impact were the presentations made at conferences, the solicitation of business and industry partnerships and the exhibit booth at educational conferences. Of moderate impact were announcements, brochures and flyers, supporting/facilitating technology user groups, the publication of articles in journals and magazines and the direct approach in the form of letters and calls to schools. Figure 9 shows these ratings for the Central Coast Consortium.

Figure 9: Marketing Effort and Impact



C. Cost Benefits

During 1989-90, the consortium felt the AB 1470 funding level was very insufficient to meet the objectives and expectations of the CTP. Central Coast reported it would not have been possible to accomplish what they did without in-kind funding and volunteer assistance. They stated however that the in-kind support and volunteer help would have occurred without the AB 1470 CTP funding. If the funding were terminated, they would have to discontinue some services.

During 1990-91, the consortium again felt the AB 1470 funding level to be very insufficient.. Without in-kind funding, it would have been impossible to accomplish what had been achieved. They do feel that the in-kind support and volunteer help would have occurred regardless of the existence of AB 1470 funding. Some services would have to be discontinued if the AB 1470 funding were terminated. In general, they report that the CTP Consortia model is a cost-effective approach to providing regional support services.

VI. Recommendations

During 1989-90, the consortium coordinator offered the following recommendations:

- The state should clearly define their expectations for different groups, especially in order to prevent duplication of work.
- The state should offer more support for the teachers in the area.
- Each school district should structure a TLA with an emphasis on grant proposals and grant evaluations.

Central Valley Regional Consortium

I. Background Information

The Central Valley Regional Consortium is operated out of the Fresno County Office of Education, which serves as its fiscal agent. The consortium began operations in April of 1989 and became fully operational in September of 1989. It serves a geographically defined area consisting of six counties: Kern, Fresno, Kings, Mariposa, Merced and Madera. There is a $75 voting fee and a $25 associate fee charged for membership in the consortium.

The consortium has an extensive set of bylaws which outline its service area, purpose, philosophy, governance structure, and finances. The organizational structure includes an Executive Board, Coordinator, and Assistant Coordinator. The Fresno County Office of Education also has representation on the Executive Board, and considers itself an integral part of the consortium.

II. Planning

In order to assess the local needs for CTP services, surveys were conducted of consortium members. Input from the CTP council and the judgement of the consortium staff were also used to set priorities for services. The need most often suggested by the surveys was staff development, including training for administrators and on technology awareness, basic concepts of educational technology, and advanced training in the form of continuing education for those already technologically literate.

During 1989-90, over 100 requests were received by the consortium for AB 1470 School-Based Grant project guideline information and development assistance. The Coordinator estimates that between 51 and 100 requests were received for district level technology use planning assistance. The Coordinator estimates that between 26 and 50 requests were received for information on software and video products. Teleconference information, technical assistance with hardware, and assistance with staff development including the integration of technology into the curriculum were requested by 11-25 consortium members. The Coordinator estimates that approximately five consortium members requested Instructional Television staff development.

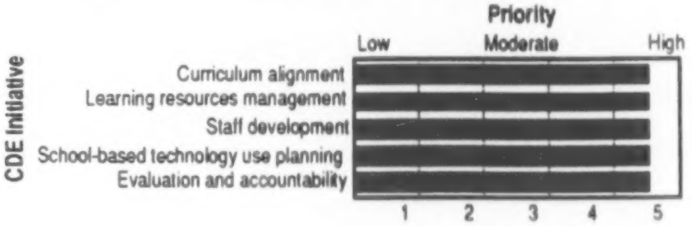
During 1990-91, over 100 requests were received by the consortium for assistance with AB 1470 project development, technology use planning, AB 1470 grant application guidelines, teleconference information, technology in the curriculum staff development, and TLAs. Between 51 and 100 requests were received for technical assistance with hardware and telecommunications. 26-50 request for software/video information were received, and 11-25 requests for assistance with ITV staff development.

The Central Valley Consortium has no formal planning group separate from the CTP, that develops an annual plan for consortium priorities and activities. They do plan and coordinate significantly with the CDE initiatives and local needs but no formal year-long plan has ever been created.

Of the major educational and program priorities in the Central Valley Consortium, during 1989-1990 highest priority was given to support of AB 1470 grant projects, technology leadership academies, telecommunications support (CSUNet), information dissemination and staff development. Responding to information requests are given significant priority. Technology-Curriculum integration and technical support for equipment utilization was considered of moderate priority. Lowest priority was given to site-based technology use planning and program planning and implementation.

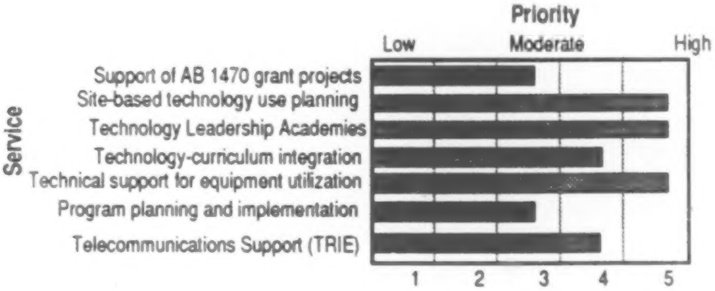
Figure 1 shows the priorities given to the CDE's initiatives while the plan was being developed.

Figure 1: Priority Given to CDE Initiatives



During 1990-91, highest priority was given to site-based technology use planning, Technology Leadership Academies, Technology-Curriculum Integration, technical support for equipment utilization, and responding to information requests, telecommunications support (CSUNet), and disseminating information. Moderate priority was given to support of AB 1470 projects and program planning and implementation.

Figure 2: Service Priorities



III. Program Content and Implementation

A. Implementation of CTP Objectives

The consortium coordinators were asked to indicate the level of implementation or emphasis given to each of the fifteen activities and objectives outlined in the agreements that they made with the CTP Central Office. Figure 3 shows this information for the Central Valley Consortium. The Central Valley Consortium local objectives included administrator's workshops and increased attendance at the science TLA.

In 1989-90, the coordinator was funded for one quarter release time by the consortium during the Spring 1990 semester. Even so, she spent many 60-70 hour weeks on CTP tasks. These tasks included overall planning and management, CTP state and local council meetings, staff development workshops, coordination with other agencies, reports and surveys, and TRIE and AB 1470 project support.

In 1990-91, a total of 2185 hours of consortium staff time were spent. Out of 700 total hours, the Consortium Coordinator devoted 250 (36%) to CTP state and local meetings. Two hundred hours (29%) were devoted to staff development workshops, and 100 hours (14%) to CSUNet and TRIE. Fifty hours (7%) were spent coordinating with other agencies, and 20 hours (3%) each was spent on reports and surveys, and AB 1470 project support. Other staff members spent a combined total of 1485 hours on similar activities

Figure 3: Implementation and Emphasis of CTP Activities and Objectives

CTP Activity/Objective	Level of Implementation or Emphasis					
	Not implemented or emphasized	Not possible to implement of emphasize	Not implemented or emphasized in 89-90 bu planned for 90-91	Partial implementation or emphasis	Fully implemented or emphasized	Implemented or emphasized beyond expectations
General administration of the Consortium					✓	
Facilitate exchange of information on uses of technology between and among Consortium and other educational groups				✓		
Support effective uses of technology in support of California Curriculum Frameworks						✓
Ensure that membership, including teachers, have input into governance and planning.					✓	
Send a representative to consortium coordinator's meetings called by the central CTP						✓
Provide a liaison and coordination between SB 1882 Consortia, County Superintendents, MTS Projects, ITV Agencies, California Subject Matter Projects, and others.				✓		
Promote educational telecommunication use of CSUNet and TRIE					✓	
Assist the state-wide CTP in information collection and dissemination activities					✓	
Provide evaluation data to the CTP central office						✓
Conduct annual needs assessment/resource identification survey to identify training resources and priorities					✓	
Assist AB 1470 School-Based Grants program by conducting orientation workshops and other support services			✓			
Conduct annual regional CTP Technology Leadership Academy						✓
Conduct locally determined workshops					✓	
Host a downlink site for annual CTP satellite broadcasts as requested					✓	
Submit a "Final Activities Report" to the CTP central office no later than October 15th.					✓	

Local initiatives included computer courses for teachers, consortium meetings and administrative workshop planning.

B. Staff Development

A total of nineteen workshops were conducted in 1989-1990, including four 2-5 day teacher-in-service workshops, four 1/2 day AB 1470 orientation workshops, three 2-5 day Technology Leadership Academies (TLAs), and two 1-2 day grant writing workshops. For members' convenience, the grant writing workshops were held in two different locations simultaneously, Visalia and Merced. All of the workshops provided planning and implementation assistance to participants. The TLAs each had between 25 and 40 participants, and all three covered history-social science topics while two also covered English-Language Arts topics. The consortium also participated in MTS Level II workshop held over 1-2 days, with 40 participants.

Other workshops focused on several locally initiated topics. These included four teacher in-services, one telecommunications workshop, one multimedia and one involving the use of CD-ROMs. Approximately 650 educators received training from the Central Valley Consortium during 1989-90. The consortium conducted formal evaluations of the TLAs; the remarks were positive but no written summary report is available.

In 1990-91, there were a total of 11 workshops. Four 2-5 day Teacher In-service Workshops served 200 people, and a half-day multimedia workshop drew 40 attendees. A half-day workshop on using CD-

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ROMs served 40 participants. Four TLAs were held, with a total attendance of 168 participants. Three lasted 2-5 days, the other 1-2 days. A 1-2 day MTS Level II workshop attracted 40 participants.

The Central Valley Consortium produced several staff development and awareness publications during 1989-90. These included announcements, brochures and flyers, and regular mailings including meeting minutes, agendas, announcements and flyers supporting special projects.

Table 1 lists the number of staff development and awareness publications produced by Central Valley Consortium during 1990-91.

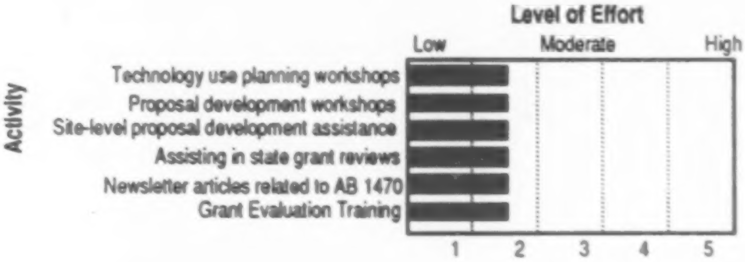
Table 1: Consortium Publications

Publications Produced or Distributed by Project	Number of Publications	Number of Copies Printed
Workshop Schedules	3	1000
Consortium Newsletters	0	N/A
Announcements, Brochures, Flyers	12	800

C. AB 1470 Project Support Services

A variety of support services were provided to AB 1470 school-based projects. Figure 4 shows the level of staff effort dedicated to each of the support services provided by the consortium. These include technology use planning workshops, assistance in state grant reviews, site-level proposal development assistance, and AB 1470 orientation and grant writing as well as telephone based assistance, all of which the consortium gave moderate effort to.

Figure 4: Support for AB 1470 school-based projects



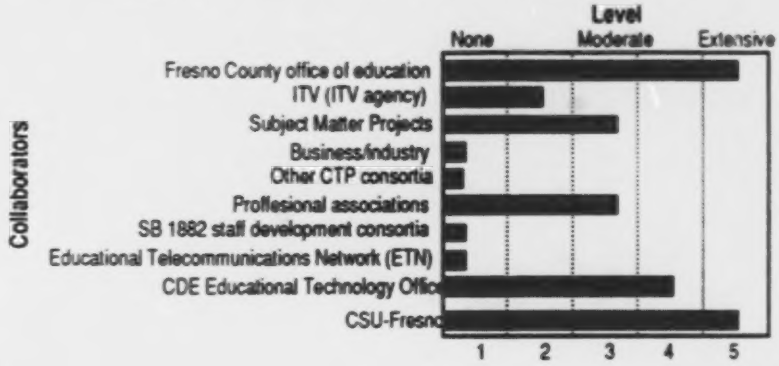
D. Collaboration with Other Agencies

In 1989-90, The Central Valley Consortium collaborated with a variety of other agencies. Extensive assistance was received from the Fresno County Office of Education which served as both the fiscal agent and the county office, the Fresno County Instructional Television Agency also collaborated with the Central Valley Consortium, some support was received by other CTP regional consortia and by the California Department of Education's Educational Technology Unit. Extensive assistance and collaboration occurred between Central Valley and Fresno State University, which organized the initial organization meeting and followed up with two years of leadership.

In 1990-91, The Central Valley Consortium again received extensive assistance from the Fresno County Office of Education, as well as CSU. Moderate collaboration with Subject Matter Projects, ITV agencies, the CDE Educational Technology Unit, and professional organizations was indicated. No collaboration occurred with business and industry, other CTP regional consortia, SB 1882 Staff Development Consortia, or ETN.

Figure 5 shows the level of collaboration with each of these agencies.

Figure 5: Collaboration with other agencies



IV. Funding Resources and Constraints

A. Funding Support

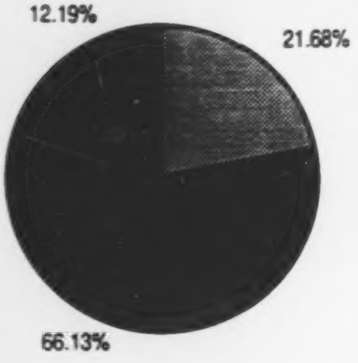
1989-90
The Central Valley Consortium received $10,000 in state AB 1470 funds as direct cash revenue. They also collected $2,860 in workshop fees and $2,760 in membership fees. Only 10 percent of staff time was funded by the CTP grant, with the other 90% donated by volunteers.

An estimated $11,500 was received from in-kind support from a variety of sources. Most of the support was from individual members who worked a total of 500 hours. Fresno State donated approximately $1,500 worth of sites for meeting and teleconference downlinks. The County office of Education donated the equivalent of about $1,500 administrative services and the school district provided about $1,000 worth of meeting spaces.

1990-91
The Central Valley Consortium again received $10,000 in state AB 1470 funds as direct cash revenue. They also collected $2,860 in workshop fees and $2,760 in membership fees. Only 10 percent of staff time was funded by the CTP grant, with the other 90 percent donated by volunteers.

An estimated $30,500 was received from in-kind support from a variety of sources. Most of the support ($20,000) came from school districts in the form of release time, equipment usage, and facilities.The Fresno County Office of Education, and colleges and universities both donated approximately $1,500 each. Individual members contributed a total of $7,500. Figure 6 shows revenue sources.

Figure 6: Revenue Sources

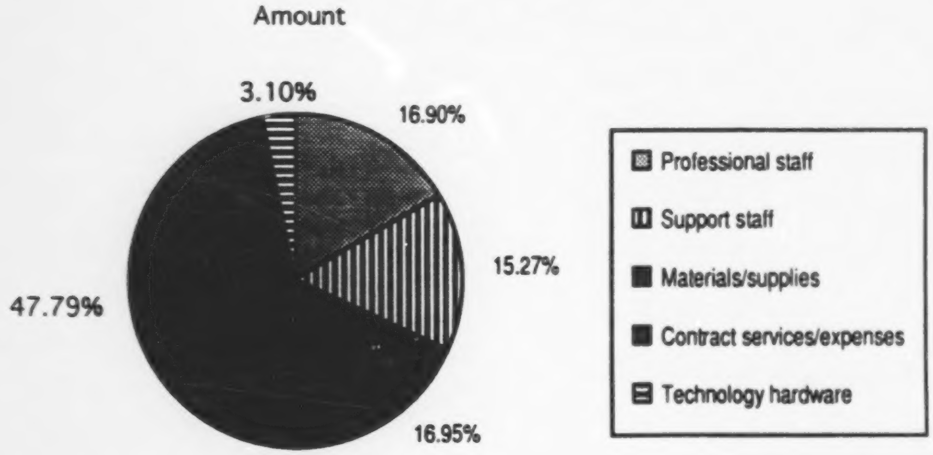


Source	1989-90 Amount	1990-91 Amount
▨ State AB 1470 funds	$10,000	$10,000
■ In-kind support	$11,500	$30,500
■ Other	$5,620	$5,620
Total	$27,120	$46,120

B. Consortium Expenditures

Data was not submitted for 1989-90. For 1990-91, The Central Valley Consortium's expenditures were $48,947, which included staff time, clerical support, printing, office supplies, consultants, and capital outlay. Figure 7 shows consortium expenses.

Figure 7: Consortium Expenses



C. Supporting and Impeding Factors

In 1989-90, the factors that most noticeably facilitated the delivery of services included interaction with the CTP central office, Fresno County Office of Education in its role as both fiscal agent and county office, Fresno State University, the availability of staff and consultants to provide professional development and the availability of CSUNet. The CDE and money generated from membership fees had a slight facilitating factor. The factors that impeded service delivery during 1989-90 included the geographic size of the area, the lack of long-term volunteers and limited capabilities for production and distribution of CTP publications.

In 1990-91, interaction with the CTP central office, and colleges and universities were major facilitating factors, while the CDE and County Offices of Education were moderate factors. Technology manufacturers and vendors, and business and industry weren't factors. Impeding factors included the geographic size of the area, the consortium fiscal agent, and limited capabilities for production and distribution CTP publications.

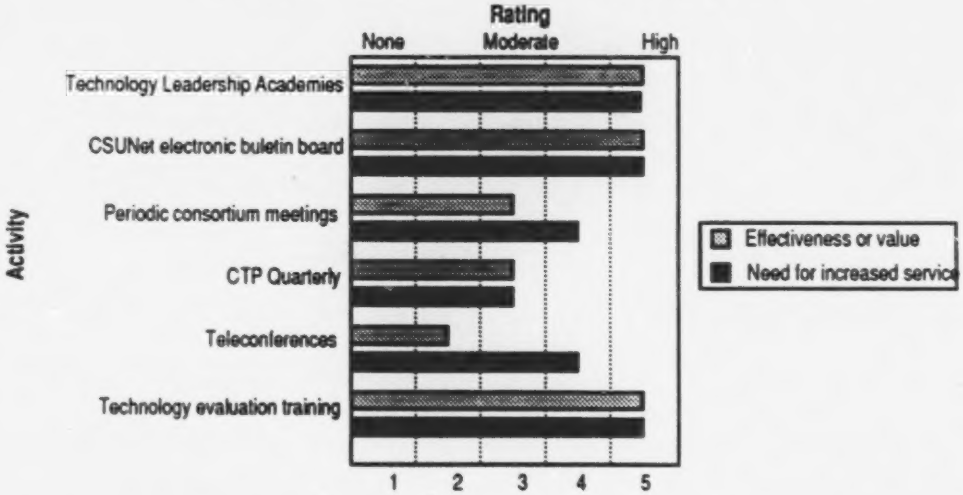
V. Outcomes

A. Impact of Services

The coordinators were asked to rate the effectiveness or value to participants of each service that was offered and to rate the need for increased service in that area. All of the results were based on informal comments, testimony and the coordinators general perceptions. In 1989-90, the Coordinator indicated the following CTP activities were effective and valuable but increased service was needed: TLAs, CSUNet electronic bulletin board, AB 1470 proposal writing workshops, local consortium newsletters, technology evaluation training and teacher in-services. Of high effectiveness and value but no increase needed, the coordinator mentioned periodic consortium meetings, CTP Quarterly and teleconferences. The coordinator also stated AB 1470 technology use planning workshops need to be increased.

In 1990-91, technology leadership academies, technology evaluation training, and the CSUNet electronic bulletin board were of high value. Periodic consortium meetings, and the CTP quarterly were of moderate value, while teleconferences had slightly moderate effectiveness. Figure 8 shows effectiveness and need for services.

Figure 8: Effectiveness and need for services



The Coordinator reported that of all the CTP initiated activities and resources provided during 1989-90, those of greatest benefit were the teacher courses, which showed to be directly beneficial in the classroom. Also beneficial was AB 1470 assistance, primarily the workshops. In 1990-91, those of greatest benefit were the Administrator Workshop, Evaluation Training, and the Science TLA, which gave a direct hands-on benefit to curriculum and instruction.

B. Marketing Effort and Impact

The coordinators were asked to rate the effectiveness or value to participants of each service that was offered and to rate the need for increased service in that area. All of the results were based on informal comments, testimony and the coordinators general perceptions. In 1989-90, the Coordinator reported the

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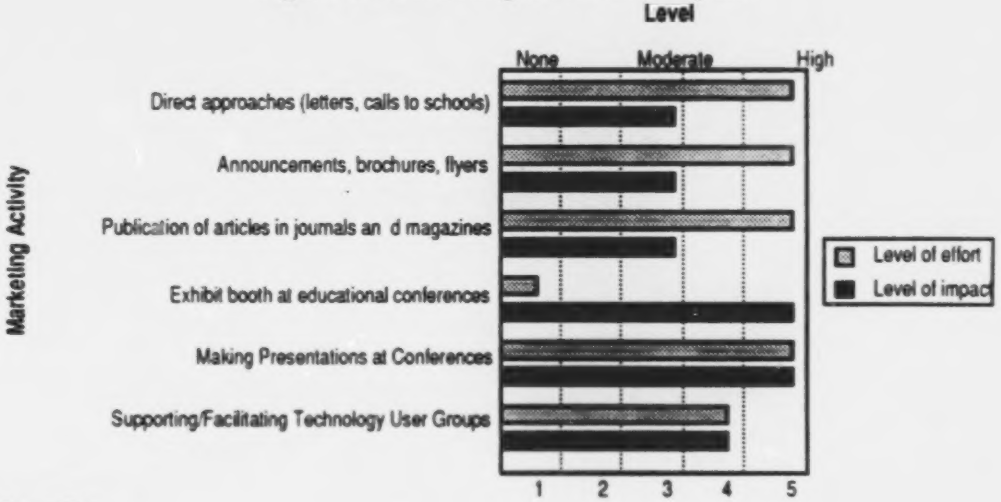
following CTP activities were effective and valuable but increased service was needed: Technology leadership academies, CSUNet electronic bulletin board, AB 1470 proposal writing workshops, local consortium newsletters, technology evaluation training and teacher in-services. Of high effectiveness and value with no increase needed the coordinator mentioned periodic consortium meetings, the CTP Quarterly, and teleconferences. In 1990-91, all marketing efforts except education conference exhibit booths required high levels of effort. See Figure 9 for level of marketing effort and impact.

Figure 9: Marketing Effort and Impact



C. Cost Benefits

In 1989-90, the consortium staff stated that the AB 1470 funding level was insufficient to meet the objectives and expectations of the CTP Regional Consortia. It would not have been possible to achieve what they have without the existence of in-kind funding and volunteer assistance. However, they believe this in-kind funding and volunteer assistance would not have occurred without AB 1470 CTP funding. The Central Valley Consortium would have to discontinue most services if their funding were terminated. They do agree on the whole that the CTP Consortia model is a cost-effective approach to providing regional support services.

In 1990-91, the consortium staff reported the funding level was somewhat inadequate. It would not have been possible to achieve what they have without the existence of in-kind funding and volunteer assistance. In addition, they believe the in-kind funding and volunteer assistance would exist regardless of wether they had received any AB 1470 CTP funding. The Central Valley Consortium would have to discontinue most services if their funding were terminated. They believed that in general, the CTP Consortia model is a cost-effective approach to providing regional services.

VI. Recommendations

In 1989-90, the Central Valley CTP Coordinator offered the following recommendations

- The organizational structure on the state CTP level should be improved.
- There should be more collaboration between CTP Consortia and other agencies.
- There should be an on-going evaluation procedure throughout the length of the project.

Delta Sierra Regional Consortium

I. Background Information

The Delta Sierra Regional Consortium is operated out of the Stanislaus County Office of Education, which serves as its fiscal agent. The consortium began operations in December of 1989 and became fully operational in April of 1990. It serves a geographically defined area consisting of five counties: Amador, Calavaras, San Joaquin, Stanislaus and Tuolumne. There is no set of membership requirements or fee structure.

The consortium has an extensive set of bylaws which outline its service area, purpose, philosophy, governance structure, and finances. The organizational structure includes a Coordinator and a Steering Committee. The Steering Committee consists of 18 members, including one representative from each county office of education, one teacher representative from each county, one teacher representative from district with a 20,000+ Average Daily Attendance (ADA), two representatives from higher education, one representative from business/industry, one representative from educational technology professional organizations, one school site administrator and one teacher representative from the region-at-large. Two new members were added to the consortium in 1990-91, one site level administrator and one teacher. The host agency presently views the consortium as an integral part of that agency.

II. Planning

In order to assess the local needs for CTP services, surveys were conducted of consortium members, and administrators. Input from the CTP council and the judgement of the consortium organizational steering committee were also used to set priorities for services. The need most often suggested by the surveys was staff development, including the use of new technologies and the integration of technologies into the curriculum.

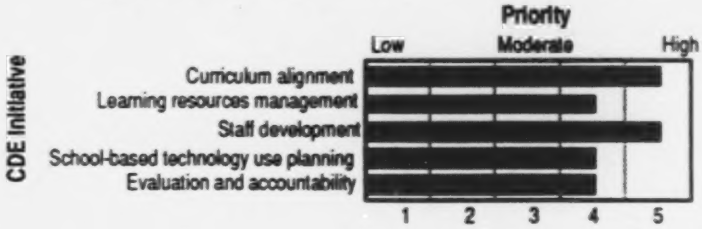
During 1989-90, over 100 requests were received by the consortium for software/video information and questions, information about AB 1470 Grant Application Guidelines and ITV staff development. The Coordinator estimated that between 51-100 requests were handled for project development assistance, and technology use planning assistance on the school district level. Technical assistance with hardware, teleconference information and technology in the curriculum staff development were also provided.

During 1990-91, over 100 requests for assistance with hardware and video, and ITV staff development information were received. Between 51-100 requests were received for technology use planning assistance, technical assistance with hardware, information about AB 1470 Grant Application guidelines, teleconference information, and assistance with technology in the curriculum staff development. Between 26 and 50 request were received for AB 1470 project development assistance.

The 1989-1990 year was an organizational year for the Delta Sierra Regional Consortium. While they did not develop an annual plan, they do have a formal planning group or committee that is separate from the CTP council. Of primary importance were curriculum alignment and staff development. High priority was given to school-based technology use planning and moderate priority was assigned to learning resources management and evaluation and accountability.

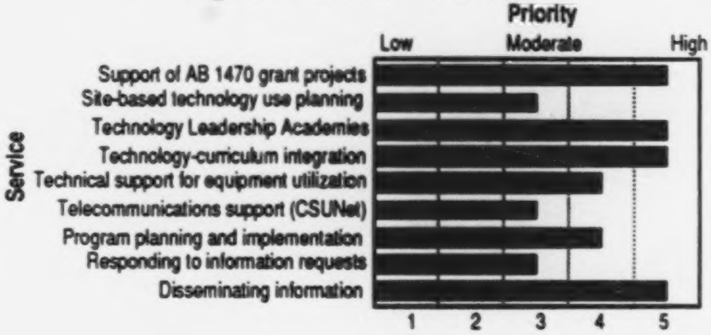
Again keeping in mind that 1989-1990 was an organizational year, highest emphasis was given by the Consortium to the support of AB 1470 grant projects, Technology Leadership Academies (TLA), responding to information requests, and disseminating information. Of moderate priority was site-based technology use planning, technology-curriculum integration and technical support. Figure 1 shows priority given to CDE initiative.

Figure 1: Priority Given to CDE Initiatives



The plan was used to some degree as a working document to guide the day-to-day implementation but again, it was an organizational year. In 1990-91, the users of the Delta Sierra Regional Consortium provided input to the annual plan in the form of consortium council meetings and informational input. The planning of consortium activities is coordinated to a great degree with those of the host agency staff. Figure 2 shows the priorities assigned to the different CTP services in Delta Sierra Regional Consortium's plan.

Figure 2: Service Priorities



III. Program Content and Implementation

A. Implementation of CTP Objectives

The consortium coordinators were asked to indicate the level of implementation or emphasis of each of the fifteen activities and objectives outlined in the agreements made with the CTP central office. Figure 3 shows this information for the Delta Sierra Regional Consortium.

The coordinator spent approximately 50 percent of the allotted time during the 1989-90 school year on overall planning and management, about 20 percent on CTP State and Local Council Meetings, fifteen percent on staff development workshops, seven percent coordinating with other agencies, and another seven percent on reports, surveys, CSUNet, TRIE, and AB 1470 project support. Both the District Contacts and technical and Clerical support time was allocated in about the same proportional breakdown as the coordinator. The county and district contact time was similarly spent but with a greater emphases on staff development.

For 1990-91, the coordinator spent approximately 41 percent of the time on overall planning and management. 22 percent was spent on CTP state and local meetings, while 18 percent was spent on staff development workshops. five percent each was spent on CSUNet/TRIE-related activities and AB 1470 project support. Approximately 1500 hours were spent by support staff on the same type of activities.

Figure 3: Implementation and emphasis of CTP activities and objectives

CTP Activity/Objective	Level of Implementation or Emphasis: Not implemented or emphasized	Not possible to implement of emphasize	Not implemented or emphasized in 89-90 bu planned for 90-91	Partial implementation or emphasis	Fully implemented or emphasized	Implemented or emphasized beyond expectations
General administration of the Consortium					✓	
Facilitate exchange of information on uses of technology between and among Consortium and other educational groups					✓	
Support effective uses of technology in support of California Curriculum Frameworks					✓	
Ensure that membership, including teachers, have input into governance and planning.				✓		
Send a representative to consortium coordinator's meetings called by the central CTP						✓
Provide a liaison and coordination between SB 1882 Consortia, County Superintendents, MTS Projects, ITV Agencies, California Subject Matter Projects, and others.						✓
Promote educational telecommunication use of CSUNet and TRIE				✓		
Assist the state-wide CTP in information collection and dissemination activities					✓	
Provide evaluation data to the CTP central office				✓		
Conduct annual needs assessment/resource identification survey to identify training resources and priorities					✓	
Assist AB 1470 School-Based Grants program by conducting orientation workshops and other support services						✓
Conduct annual regional CTP Technology Leadership Academy						✓
Conduct locally determined workshops					✓	
Host a downlink site for annual CTP satellite broadcasts as requested						✓
Submit a "Final Activities Report" to the CTP central office no later than October 15th.				✓		

B. Staff Development

1989-90
The Delta Sierra Regional Consortium conducted several workshops, including three 1/2 day AB 1470 Technology Use Plan workshops, one 2-5 day history/social science TLA and eight half-day sessions on AB 1470 proposal writing. The Consortium conducted surveys of the TLAs, AB 1470 proposal writing workshops and other AB 1470 project assistance. The ways they plan to use the surveys include assessing the impact of the TLA in supporting the districts staff development activities in technology integration.

1990-91
The Delta Sierra Regional Consortium conducted a total of 14 workshops, including 5 half-day AB 1470 evaluation workshops. A 2-5 day TLA II workshop, a 2-5 day TLA III workshop, a 1-2 day TLA Network workshop, and a half-day TLA Project workshop were held, with 57 people attending. Two half-day Technology Use workshops drew 21 participants, and a half-day English/Language Arts and Technology workshop was attended by one person. A half-day Desktop Publishing in the Classroom workshop served 20 participants, and a half-day Software Utilization workshop was attended by four participants.

Table 1 lists the number of staff development and awareness publications produced by the Delta Sierra Regional Consortium during 1990-91.

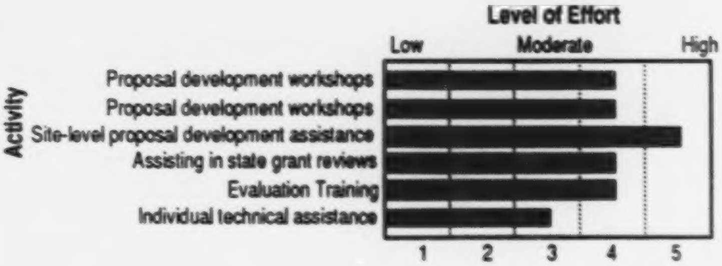
Table 1: Consortium Publications

Publications Produced or Distributed by Project	Number of Publications	Number of Copies Printed
Workshop Schedules	3	500
Consortium Newsletters	2	1,500
Announcements, Brochures, Flyers	5	1,000

C. AB 1470 Project Support Services

A variety of support services were provided to AB 1470 school-based projects. In 1989-90, the Delta Sierra Regional Consortium emphasized site-level proposal development assistance, with significant effort given to proposal development workshops, assisting in state grant reviews, and newsletter articles related to AB 1470. A moderate amount of effort was dedicated to school based grant evaluation trainings. The consortium also provided extensive announcement, brochures and flyers. In 1990-91, much effort was given to site-level proposal development assistance, proposal development workshops, assisting in state grant reviews, newsletter articles related to AB 1470, and school-based grant evaluation training. Technology Use Planning workshops received moderate effort. Figure 4 shows the level of staff effort dedicated to each of the support services provided by the consortium.

Figure 4: Support for AB 1470 school-based projects

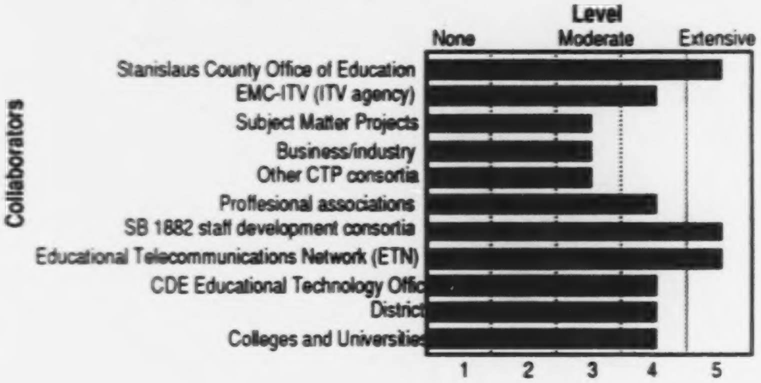


D. Collaboration with Other Agencies

The Delta Sierra Regional Consortium collaborated with a variety of other agencies in 1989-90. Extensive help was received from the County Office of Education which printed and distributed flyers and provided the use of facilities. Also of extensive help was the SB 1882 Staff Development Consortia which assisted with developing regional project proposals. The AB 1470 contact for Delta Sierra was on the SB 1882 governing board. The Educational Telecommunications Network (ETN) offered extensive support in the form of county media connection and by playing a role in the consortium steering committee. Of significant assistance were the ITV agencies which provided assistance with TLAs, Professional Associations, as well as the CDE's Educational Technology Unit. The Districts offered support through the use of facilities and by the University through the use of the television studio for first general membership meeting via ITFS. Of moderate assistance were other CTP Regional Consortia. The Subject Matter Projects helped somewhat in the form of identifying a liaison with the writing projects, and business and industry offered moderate assistance.

In 1990-91, Delta Sierra collaborated extensively with the County Office of Education, SB 1882 Staff Development Consortia, and Educational Television Network. Districts, colleges and universities, the California Department of Education Educational Technology Unit, professional associations, and ITV agencies were also collaborated with heavily. Moderate collaboration with Subject Matter Projects, business and industry, and other CTP regional consortia were noted.

Figure 5: Collaboration with other agencies



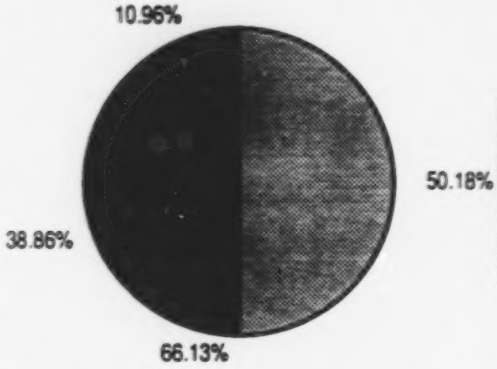
IV. Funding Resources and Constraints

1989-90
There was no information provided pertaining to the financial aspects of the Delta Sierra Regional Consortiums Technology Plan implementation for 1989-90

1990-91
The Delta Sierra Consortium received $29,700 in state AB 1470 funds as direct cash revenue. They also collected $6,488 from SB 1882 Region VI Professional Development Consortium grants. Ten percent of staff time was funded by the CTP grant, with 70 percent being funded by the host agency, and the remaining 20 percent donated by volunteers.

An estimated $23,000 was received from in-kind support from a variety of sources. Most of the support ($12,500) came from the County Office of Education in the form of five media directors working for six days. Another $6,250 came from the Fiscal Agent, and the school district donated the equivalent of $3,000 in the form of two teachers for 6 days. ITV agencies donated the equivalent of $450 in the form of three days' training, colleges and universities donated the use of the ITFS studio ($300), and business and industry lent staff support and equipment ($500). Figure 6 shows the revenue sources.

Figure 6: Revenue Sources

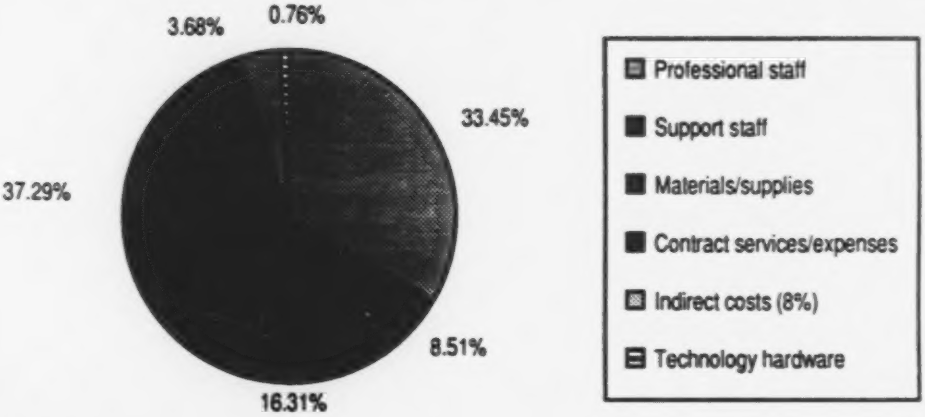


	Source	1989-90 Amount	1990-91 Amount
▨	State AB 1470 funds	$10,000	$29,700
■	In-kind support	$11,500	$23,000
■	Other	$5,620	$6,488
	Total	$27,120	$59,188

B. Consortium Expenditures

Data was not submitted for 1989-90. For 1990-91, The Delta Sierra Consortium's expenditures were $86,850, which included staff time, clerical support, printing, office supplies, consultants, and capital outlay. Figure 7 shows consortium expenditures.

Figure 7: Consortium Expenses



A. Supporting and Impeding Factors

In 1989-90, the factors that most noticeably facilitated the delivery of services were the County Office of Education, the level of support from the host agency and the availability of staff and consultants to provide professional development. Seen as having some value were the technology manufacturers and vendors the fiscal agent for the consortium, and the capabilities for producing and distributing CTP publications. The only impeding factor was the unavailability of CSUNet. The coordinator noted that since September 1990 there seemed to be an improvement in the availability of CSUNet.

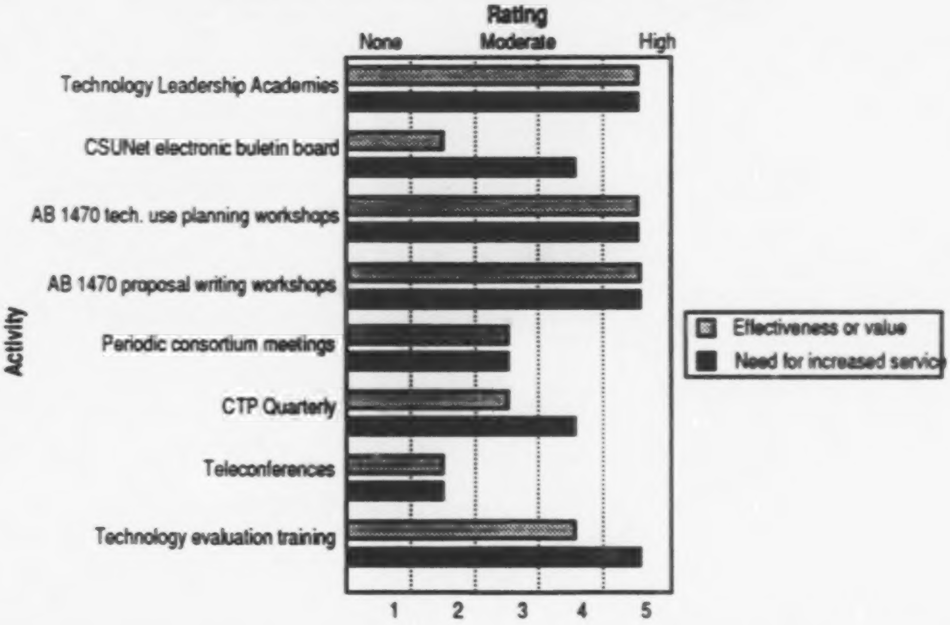
In 1990-91, The host agent, the County Office of Education, and the availability of staff and consultants to provide professional development were major facilitators. Capabilities for producing CTP publications, technology manufacturers and vendors, and the consortium fiscal agent were listed as moderate facilitating factors. Because most of Delta Sierra's region must pay long distance toll rates to access CSUNet, its availability was seen as a moderate impediment.

V. Outcomes

A. Impact of Services

The coordinators were asked to rate the effectiveness or value to participants of each service that was offered and to rate the need for increased service in that area. Surveys of participants were used to obtain the ratings for staff development services while comments and staff perception were used to rate the others. See Figure 8 for effectiveness and need for services.

Figure 8: Effectiveness and need for services

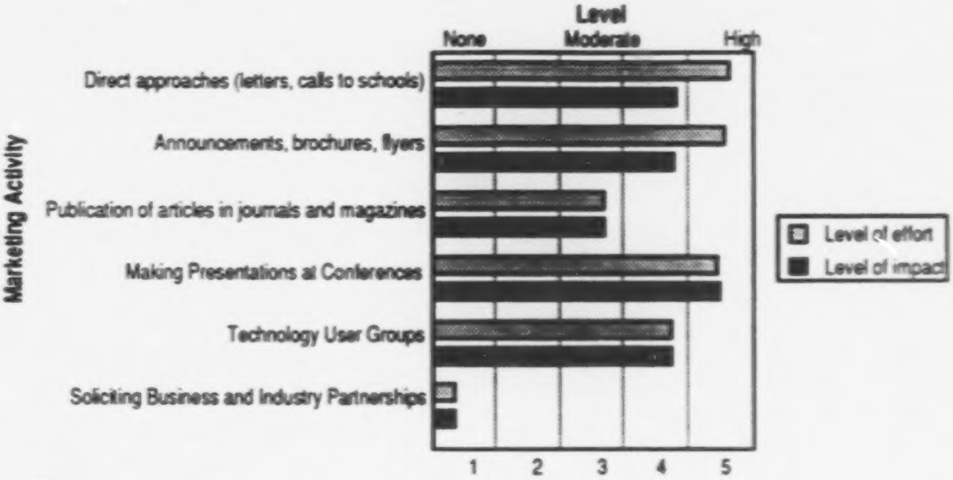


The Coordinator found the AB 1470 proposal writing workshops, SB 1882/CTP Project, and TLAs to be the most useful CTP initiated activities. The proposals increased the possibility of being funded and developing adequate technology use plans. The TLA's expanded the base of available trainers in the region and increased the skills of the participants.

B. Marketing Effort and Impact

The consortium coordinators were asked to indicate the level of effort devoted to different marketing strategies and to rate the level of impact produced by each activity. Figure 9 shows these ratings for the Delta Sierra Regional Consortium.

Figure 9: Marketing Effort and Impact



C. Cost Benefits

The Delta Sierra Regional Consortium reported that given the objectives and expectations of the regional CTP the funding level for their local consortia is somewhat insufficient. They indicate it would not have been possible to accomplish what they did without the existence of in-kind funding and volunteer assistance. The consortia reports that they rely on their constituents to provide assistance in planning and implementation because they do not charge membership fees. The CTP would have to discontinue some services if AB 1470 funding were terminated. In general, the consortium states that the model is a cost effective approach to providing regional support services.

VI. Recommendations

The Delta Sierra Regional Consortium recommended the following:

- Continue to allow local consortium to operate independently
- Encourage alignment of CTP regions with those of county/state steering committee
- CTP should consider applying for grants from the corporate world
- When a subject matter project is not available to serve a region, other groups should be contacted (e.g. TLA invited Science Project participants — we have none — but we do have CSIN representatives in our region)
- Timelines for AB 1470 local assistance grants should be moved forward to better assist schools
- Increase monies allocated to each consortium, especially at issue will be coordinator's salary
- Encourage coordination at state and local level
- Allow TLAs to be conducted in subject areas according to local needs rather than state mandates

Inland Technology Consortium

I. Background Information

The Inland Technology Consortium (ITC) is operated out of the San Bernandino County Office of Education, which serves as its fiscal agent. The consortium began operations in August of 1988 and became fully operational in November of 1988. It serves a geographically defined area consisting of four counties: Riverside, Inyo, Mono and San Bernandino. No fees are charged for membership in the consortium.

The consortium has an extensive set of bylaws which outline its service area, purpose, philosophy, governance structure, and finances. The organizational structure includes the Coordinator and an Advisory Board. A close relationship is maintained between the host agency and the consortium.

II. Planning

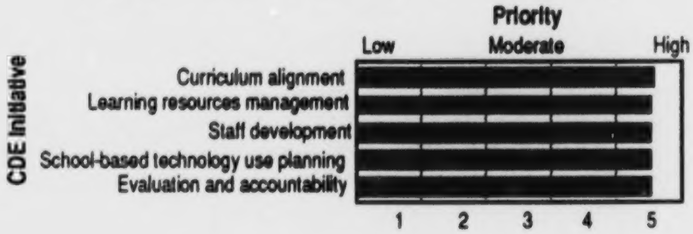
In order to assess the local needs for CTP services, surveys were conducted of teachers, administrators, and consortium members. Input from the CTP council and from representatives of the Institution of Higher Education (IHE) were also used to set priorities for services. The needs most often suggested included hands-on opportunities for existing technologies, entry level introduction to emerging technologies and the networking of people and information.

During 1989-90, over 100 requests were received by the consortium for AB 1470 School-Based Grant project development assistance, district level technology use planning assistance, software/video information and questions, technical assistance with hardware, and information about AB 1470 Grant Application Guidelines. Between 51-100 requests were handled for teleconference information, technology in the curriculum staff development, ITV staff development and networking information. Between 26 and 50 requests were handled for hardware purchase recommendations, and between 11 and 25 requests were handled for advising districts on school-site planning.

During 1990-91, over 100 requests were received for technology use planning assistance, software/video information, information on AB 1470 Grant Application Guidelines, teleconference information, technology in the curriculum staff development information, ITV staff development assistance, and information on AB 1470 evaluation workshops. Between 51-100 requests for AB 1470 School-Based Grant project development assistance and technical assistance with hardware were received, as well as 6-10 requests for information on RIMS planning committee work.

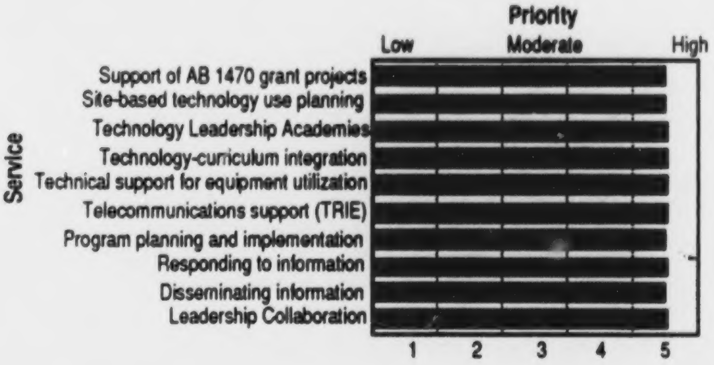
The ITC has a formal planning group, separate from the CTP council, which develops an annual plan for consortium priorities and activities. Figure 1 shows the priorities given to the CDE's initiatives while the plan was being developed.

Figure 1: Priority Given to CDE Initiatives



The consortium plan is used to some extent as a working document to guide its day-to-day operations. Users of consortium services provide input to the plan by means of surveys, consortium council meetings, and informal comments. For example, after each workshop offered by the ITC an evaluation survey is given to participants. The planning of activities is extensively coordinated with the existing staff development and technology resources of the San Bernardino County Office of Education. Figure 2 shows the priorities assigned to the different CTP services in the Inland Technology Consortium's plan.

Figure 2: Service Priorities



III. Program Content and Implementation

A. Implementation of CTP Objectives

The consortium coordinators were asked to indicate the level of implementation or emphasis of each of the fifteen activities and objectives outlined in the agreements made with the CTP central office. The Inland Consortium added additional local objectives to the listings of CTP activities and objectives included in the survey. In 1989-90 Inland emphasized the regional needs assessment and resource identification, the Technology Leadership Academy, Local Initiative Workshops, AB 1470 grant writing workshops and the delivery of the California Curriculum through the appropriate technology. In 1990-91, Inland emphasized all activities and objectives. Figure 3, on the following page, shows this information for the ITC.

The Coordinator calculated that seven members of the Advisory Board dedicated 1,240 hours in the first year of the consortium. They did not count the Local Educational Agency (LEA) representative nor the Riverside County Office of Education representative nor time from the LEA business office personnel. This time was broken down in a variety of areas, including overall planning and management, CTP meetings, staff development workshops, coordination with other agencies, reports and surveys, CSUNet and TRIE, and AB 1470 project support. In 1990-91 over 1400 hours were dedicated, which includes time spent by LEA Representatives engaged in overall planning and management. The remainder was was broken down into CTP meetings, reports and surveys, staff development workshops, CSUNet and TRIE, newsletter publication, and AB 1470 project support.

Figure 3: Implementation and emphasis of CTP activities and objectives

CTP Activity/Objective	Level of Implementation or Emphasis: Not implemented or emphasized	Not possible to implement of emphasize	Not implemented or emphasized in 89-90 but planned for 90-91	Partial implementation or emphasis	Fully implemented or emphasized	Implemented or emphasized beyond expectations
General administration of the Consortium						✓
Facilitate exchange of information on uses of technology between and among Consortium and other educational groups						✓
Support effective uses of technology in support of California Curriculum Frameworks						✓
Ensure that membership, including teachers, have input into governance and planning.						✓
Send a representative to consortium coordinator's meetings called by the central CTP						✓
Provide a liaison and coordination between SB 1882 Consortia, County Superintendents, MTS Projects, ITV Agencies, California Subject Matter Projects, and others.						✓
Promote educational telecommunication use of CSUNet and TRIE						✓
Assist the state-wide CTP in information collection and dissemination activities						✓
Provide evaluation data to the CTP central office						✓
Conduct annual needs assessment/resource identification survey to identify training resources and priorities						✓
Assist AB 1470 School-Based Grants program by conducting orientation workshops and other support services						✓
Conduct annual regional CTP Technology Leadership Academy					✓	
Conduct locally determined workshops						✓
Host a downlink site for annual CTP satellite broadcasts as requested						✓
Submit a "Final Activities Report" to the CTP central office no later than October 15th.					✓	

B. Staff Development

1989-90
The ITC conducted eleven AB 1470 half-day orientations, serving about 400 consortium members. An English/Language Arts TLA served 29 consortium members for 5 days. One half-day seminar was held on FrEdMail for nine members.

The consortium conducted formal evaluations of the Technology Leadership Academies, the Technology Use planning workshops, AB 1470 proposal writing workshops and Local Initiatives Workshops.

1990-91
The ITC conducted 12 CSUNet/TRIE half-day training sessions, serving 225 consortium members. 6 half-day AB 1470 Evaluation workshops served 125 members, and a History/Social Science TLA served 28 members for 3 days.

Table 1 lists the number of staff development and awareness publications produced by the Inland Technology Consortium during 1990-91.

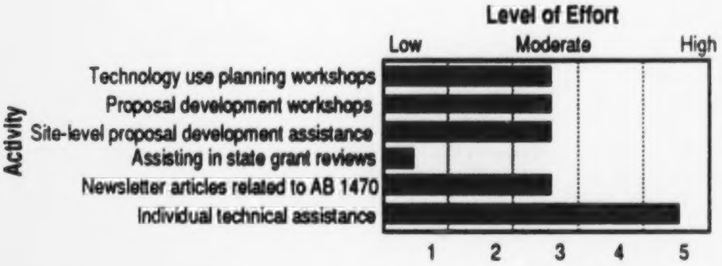
Table 1: Consortium Publications

Publications Produced or Distributed by Project	Number of Publications	Number of Copies Printed
Workshop Schedules	10	500 each
Consortium Newsletters	3	500 each
Announcements, Brochures, Flyers	50	500 each
General Information Articles	15	400 each
Research Information	5	400 each
Advisory Board Meeting Minutes	10	20 each
General Meeting Minutes	10	350 each

C. AB 1470 Project Support Services

A variety of support services were provided to AB 1470 school-based projects. Figure 4 shows the level of staff effort dedicated to each of the support services provided by the consortium.

Figure 4: Support for AB 1470 school-based projects

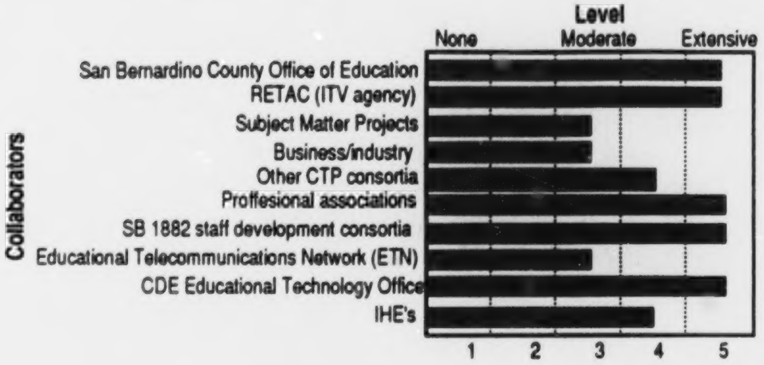


D. Collaboration with Other Agencies

The ITC collaborated with a variety of other agencies. In 1989-90, extensive help was received from the San Bernardino County Office of Education which served as the fiscal agent and had Advisory Board representation. Both Riverside and San Bernardino counties have ITV Agency representatives who serve on the ITC Advisory Board. Other CTP Regional Consortia collaborated in an informational sense, through requests for shared information. Advisory representatives in the county office included county coordinators in Subject Matter Projects who provided information linkage. Professional Associations, CUE in particular, assisted through direct communication. The SB 1882 Staff Development Consortia were involved in the local consortia Grant Writing and planning. Three of the four county office representative on the Advisory Board are ETN field representatives. The CSU San Bernardino campus assisted in the area of staff help to plan and implement the TLA.

In 1990-91, extensive help was received from the County Office of Education and the ITV Agency, both of which have representatives on the Advisory Board. The California Department of Education, the SB 1882 Staff Development Consortia, and various professional associations also collaborated extensively with the ITC. More informal cooperation existed with Subject Matter Projects (California Writing, Literature, Math), business and industry, and Educational Telecommunications Network (ETN). Figure 5 shows the level of collaboration with each of these agencies.

Figure 5: Collaboration with other agencies



IV. Funding Resources and Constraints

A. Funding Support

The only direct cash revenue received by the ITC was $40,000 in state AB 1470 funds received from the CTP. No membership or workshop fees were collected and no services were provided on a cost-recovery basis. The Coordinator found it impossible to attach a dollar value to the level of in-kind support that was accrued during 1989-90, however. The in-kind support included support from the fiscal agent in the form of director, coordinator and clerical support. School districts released representatives to attend monthly meeting and to participate in workshops, and Advisory Board member districts released representatives to attend board meetings. Much of the consortium's success was attributed to the availability of the CTP director and staff for technical assistance. CSU San Bernardino contributed greatly toward the success of the TLA. Figure 6 shows revenue sources.

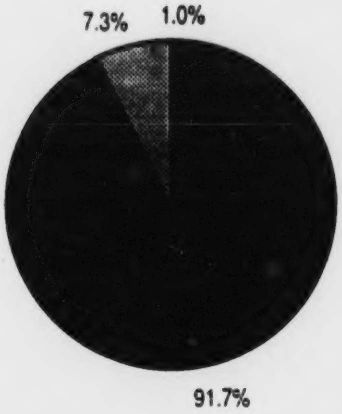
Figure 6: Revenue Sources

Source	1989-90 Amount	1990-91 Amount
State AB 1470 funds	$40,000	Not Submitted
In-kind support	NA	NA
Total	$40,000	

B. Consortium Expenditures

The Inland Consortium's total expenditures for 1989-90 were $39, 585 including staff time, clerical support, equipment, services, and other agencies and individuals. See Figure 7 for consortium expenses.

Figure 7: Consortium Expenditures



Expenditure	1989-90 Amount	1990-91 Amount
▨ Professional staff	$0	Not Submitted
■ Support staff	$0	
■ Materials/supplies	$384	
■ Contract services/expenses	$36,960	
▨ Indirect costs (8.65%)	$2,960	
⊟ Technology hardware	$0	
Total	$39,585	

C. Supporting and Impeding Factors

The factors that most noticeably facilitated the delivery of services in 1989-90 included the interaction with the CTP central office, the fiscal agent, the county office of education, recruiting districts or schools form membership. The level of support from the host agency, the availability of staff and consultants to provide professional development, the capabilities for producing and distributing CTP publications and the availability of CSU Net were also important supporting factors. Other factors that had a slight facilitating effect were: CDE support, assistance from technology vendors ("more could be generated with some additional effort"), assistance from colleges and universities, and assistance from business and industry. The factor that most impeded the delivery of service was the size and lack of definition within the geographical area.

In 1990-91, factors that facilitated the delivery of services were interaction with the CTP central office, the fiscal agent, the county office of education, CDE support, professional development opportunities, CSUNet availability, county office JET Service use, the identification of "voting member" representatives, and membership recruitment. Colleges and universities also play a role in facilitation. The geographic size of the service area acted as a slight impediment.

V. Outcomes

A. Impact of Services

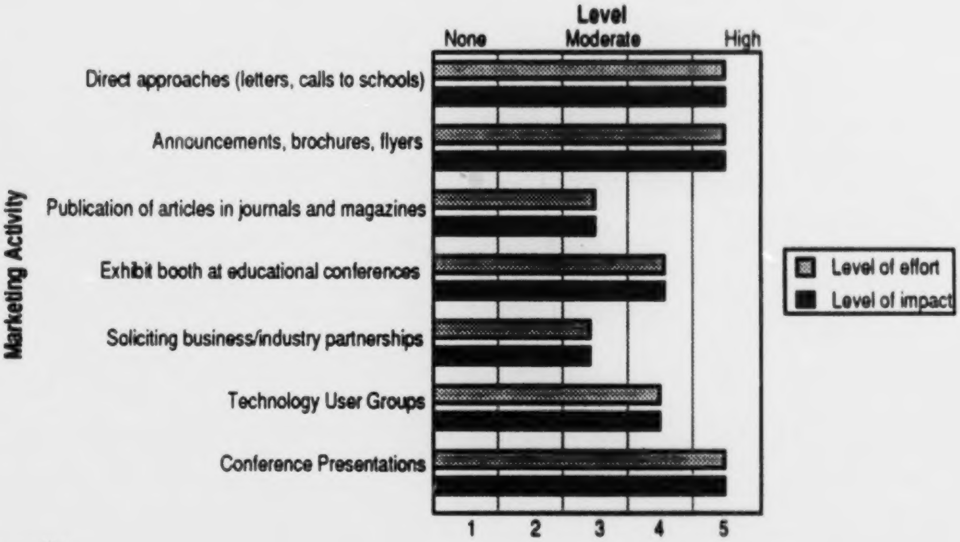
Of all the CTP initiated activities and resources provided during 1989-90 the Coordinator found most important the AB 1470 workshops, the regular consortium meetings and regular communication with the CTP, ITC, and the CDE Educational Technology Unit. Although the number of grant recipients was limited, all attendees found the extensive technology use planning assistance to be valuable. The Consortium meetings brought together technology and curriculum interests and allowed for exponential opportunities through networking. The communication with the CTP, ITC, and CDE empowered all parties by providing information and services based upon sound criteria and practices.

During 1990-91, the AB 1470 workshops, consortium meetings, consortium newsletters, CTP Quarterly, and technology evaluation training were the most effective activities. Technology Leadership Academies, the CSUNet electronic bulletin board, and teleconferences were also effective. A high need for increased service was noted for all activities.

B. Marketing Effort and Impact

The consortium coordinators were asked to indicate the level of effort devoted to different marketing strategies and to rate the level of impact produced by each activity. Figure 9 shows these ratings for the ITC.

Figure 8: Marketing Effort and Impact



C. Cost Benefits

For 1989-90, the consortium staff stated that given the objectives and expectations of the regional consortia, their funding level was adequate, but that it would have been impossible to accomplish what they did without the existence of in-kind funding and volunteer assistance. The in-kind support would not have occurred without the AB 1470 CTP funding, which was essential for the structure of the consortia, and the formation and implementation of the first year. If the funding were terminated, Inland would have to discontinue some services. The Coordinator commented that each county office would continue to work toward established goals, but the connectivity and group-focus-of-effort lost would diminish the results and outcomes within each county. In general, the Consortium indicated that the CTP model is a cost effective approach to providing regional support services.

For 1990-91, the consortium staff again found the funding level adequate, but without in-kind funding and volunteer assistance, the consortium achievements would not have been possible. The in-kind support and volunteer help would not have been possible without the AB 1470 CTP funding. If AB 1470 funding were terminated, some services would be discontinued. Due to the ITC and RIMS (SB 1882) collaboration, notes the Coordinator, the continuance of the ITC is assured. The Consortium director indicated that the CTP model is a cost effective approach to providing regional support services.

VI. Recommendations

In 1989-90, the Coordinators recommended the CTP offer more assistance in implementing SB 1274.

In 1990-91, the Coordinators recommended maintaining CDE and CTP leadership to direct and support local consortia. County and district offices of education involvement should be promoted in order to assure a leadership structure. Efforts for cross-information sharing with other agencies should be continued and maintained. Programs that work should be focused on; the successes in classrooms should be marketed to the public.

Superior California Educational Technology Consortium

I. Background Information

The Superior California Educational Technology Consortium (Supertech) is operated out of the California State University Foundation which serves as its fiscal agent. The Consortium began operations in April of 1989 and became fully operational in August of 1989 The Consortium serves a geographically defined region of nine counties: Siskiyou, Modoc, Trinity, Shasta, Lassen, Tehama, Plumas, Glenn and Butte. Membership from organizations or individuals outside of the region is encouraged. The Consortium serves about 300 schools, 470 school districts and 6 colleges and universities. The Consortium charges $100 per year for a voting membership and $25 to join as an associate member.

Supertech has a set of bylaws which outlines the service area, purpose, philosophy, governance structure, and finances. The organizational structure includes a coordinator and a chair, as well as a council. In 1990-91 they appointed two individuals to the posts. A close relationship is held between the Consortium and the host agency.

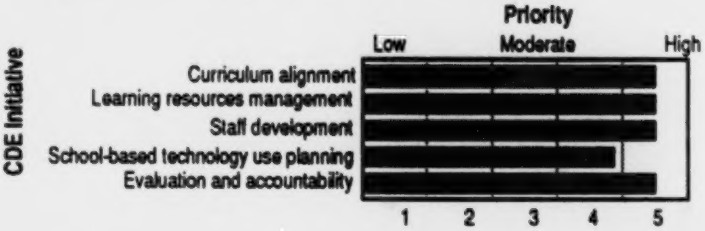
II. Planning

To determine the local needs for CTP services, surveys were conducted of teachers, administrators, and Consortium members. The judgement of the Consortium staff was also used to set priorities for services. During 1989-90, a range of 11-25 requests were handled by the Consortium for technology use planning assistance at the school district level and technology in the curriculum staff development. An estimated 6-10 requests were handled for AB 1470 project development assistance, software video information, and information about AB 1470 Grant Application Guidelines.

During 1990-91, between 26 and 50 requests were made for technology use planning assistance and information about AB 1470 Grant Application Guidelines. Between 11-25 requests were made for project development assistance, software/video information, and assistance with technology in the curriculum staff development. There were between 6-10 requests for technical assistance with hardware, information on teleconferencing, and ITV staff development.

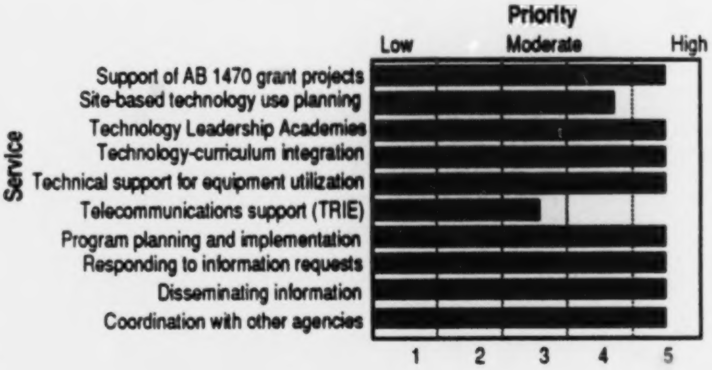
Supertech has a formal planning group, separate from the CTP council, which develops an annual plan for Consortium priorities and activities. Figure 1 shows the priorities given to the CDE's initiatives while the plan was being developed.

Figure 1: Priority Given to CDE Initiatives



The Supertech plan is used to a great extent as a working document to guide its day-to-day operations. Users of Consortium services provide input to the plan by means of Consortium council meetings, and informal comments. Figure 2 shows the priorities assigned to the different CTP services in the Supertech Consortium's plan.

Figure 2: Service Priorities



III. Program Content and Implementation

A. Implementation of CTP Objectives

The Consortium coordinators were asked to indicate the level of implementation or emphasis of each of the fifteen activities and objectives outlined in the agreements made with the CTP central office. Figure 3, on the following page, shows this information for the Supertech Consortium.

Overall planning and management and the planning and preparing of reports and surveys took up the greatest amount of the Coordinator's time in 1989-90 (just over a thousand hours), estimated at 63 percent, with the remaining Coordinator time spent in state, regional and local meetings (15%), coordinating with other agencies (17%), work on CSUNet and TRIE (9%) and staff development (8%). Approximately 1,000 hours was spent on the same activities by technical and clerical support.

In 1990-91, overall planning and management again took up the greatest amount of the coordinator's time (47%). The rest of the 668 total hours spent was taken up by staff development workshops (30%), CTP state and local meetings (14%), coordination with other agencies (5%), AB 1470 project support (3%), and preparing reports and surveys (1%). Over 600 hours were spent on the same activities by technical/clerical support, contract consultants, and volunteers.

Figure 3: Implementation and emphasis of CTP activities and objectives

CTP Activity/Objective	Level of Implementation or Emphasis: Not implemented or emphasized	Not possible to implement of emphasize	Not implemented or emphasized in 89-90 bu planned for 90-91	Partial implementation or emphasis	Fully implemented or emphasized	Implemented or emphasized beyond expectations
General administration of the Consortium						✓
Facilitate exchange of information on uses of technology between and among Consortium and other educational groups						✓
Support effective uses of technology in support of California Curriculum Frameworks						✓
Ensure that membership, including teachers, have input into governance and planning.						✓
Send a representative to consortium coordinator's meetings called by the central CTP					✓	
Provide a liaison and coordination between SB 1882 Consortia, County Superintendents, MTS Projects, ITV Agencies, California Subject Matter Projects, and others.						✓
Promote educational telecommunication use of CSUNet and TRIE						✓
Assist the state-wide CTP in information collection and dissemination activities				✓		
Provide evaluation data to the CTP central office					✓	
Conduct annual needs assessment/resource identification survey to identify training resources and priorities						✓
Assist AB 1470 School-Based Grants program by conducting orientation workshops and other support services						✓
Conduct annual regional CTP Technology Leadership Academy						✓
Conduct locally determined workshops						✓
Host a downlink site for annual CTP satellite broadcasts as requested					✓	
Submit a "Final Activities Report" to the CTP central office no later than October 15th.					✓	

B. Staff Development

A total of thirteen workshops were conducted in 1989-90, including nine AB 1470 Grant half-day workshops and 2 Technology Leadership Academies (TLAs) each lasting two days. In 1990-91, two TLA science workshops, one lasting two days, the other five days, served a total of 100 people. A half-day vendor's fair attracted 50 people. Three half-day TRIE training workshops served 20 attendees, and a full-day CD-ROM workshop was attended by 90 people.

Table 1 lists the number of staff development and awareness publications produced by the Supertech Consortium during 1990-91.

Table 1: Consortium Publications

Publications Produced or Distributed by Project	Number of Publications	Number of Copies Printed
Workshop Schedules	6	270 each
Consortium Newsletters	2	270 each
Announcements, Brochures, Flyers	6	270 each
Needs Assessment	1	300

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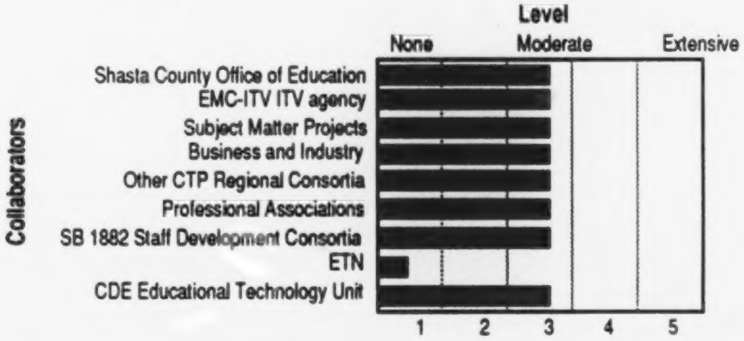
C. AB 1470 Project Support Services

For 1990-91, the Supertech Consortium found high levels of staff effort dedicated to technology planning use workshops, assisting in state grant reviews, and school-based grant evaluation training. Moderate effort was dedicated to contributing newsletter articles related to AB 1470. Low effort was expended for proposal development workshops and site-level proposal development assistance.

D. Collaboration with Other Agencies

In 1989-90, Supertech collaborated with California State University at Chico, which sponsored the winter TLA. The Shasta County Office of Education collaborated by sponsoring the summer TLA. In 1990-91, Supertech collaborated with the Shasta County Office of Education, which co-sponsored a two-day TLA. Figure 5 shows collaboration with other agencies.

Figure 5: Collaboration with Other Agencies



IV. Funding Resources and Constraints

A. Funding Support

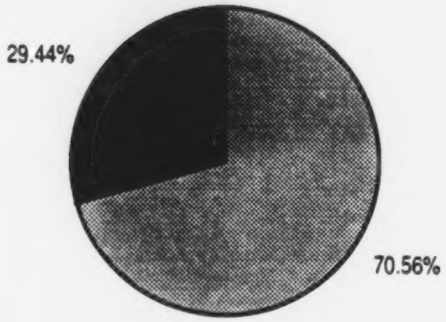
1989-90
Total direct cash revenue was $40,784. The Consortium received $6,000 in funds from the state AB 1470 funds. They also received $3,904 in workshop fees, $2,100 in membership fees, and $28,780 in direct fiscal agency contributions. Eighty-five percent of staff time was funded by the CTP grant, and the other fifteen percent donated by volunteers.

An estimated $7,600 was received from in-kind support. Most of the support, 86 percent, was from the fiscal agency which donated offices, computers, postage, phones and meeting spaces estimated at about $6,600. Another $1,000 was donated by other CTP Consortia.

1990-91
Total direct cash revenue was $29,000, all from State AB 1470 funds.

An estimated $12,100 was received from in-kind support. An estimated $8,000 (65%) was in the form of hardware, another $2,000 (17%) was from the fiscal agency, which donated President and Coordinator time. Another $1,000 (8%) was received from the school district in the form of personnel to conduct activities. The County Office of Education, as well as business and industry donated hardware valued at $700 (6%) and $400 (3%), respectively. See Figure 6 for revenue sources.

Figure 6: Revenue Sources

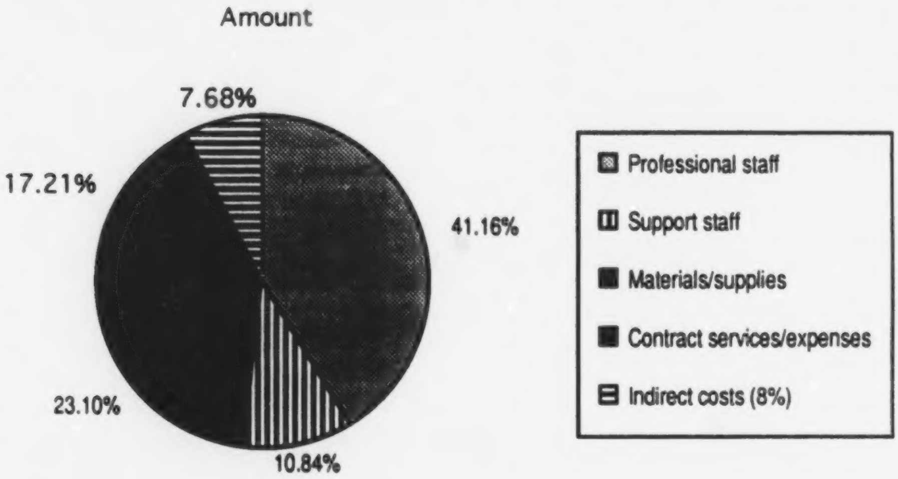


Source	1989-90 Amount	1990-91 Amount
▨ State AB 1470 funds	$6,000	$29,000
■ In-kind support	$7,600	$12,100
■ Other	$34,784	
Total	$48,384	$41,100

B. Consortium Expenditures

Supertech did not submit data on expenses for 1989-90. For 1990-91, Supertech's expenditures were $42,311, including staff time, clerical support, equipment, services, and supplies. See Figure 7 for consortium expenses.

Figure 7: Consortium Expenses



C. Supporting and Impeding Factors

The coordinators were asked to identify the factors that supported and/or impeded the delivery of services. The factor that most noticeably facilitated the delivery of services was the availability of TRIE-CSUNet. Other factors that had a facilitating effect were: interaction with CTP central office, county offices of education, technology manufacturers and vendors, colleges and universities, the level of support from membership fees, the availability of staff and consultants to provide professional development, and the consortium's capabilities for producing and distributing CTP publications. The factor that most impeded service delivery during 1989-90 was the geographic size of the service area.

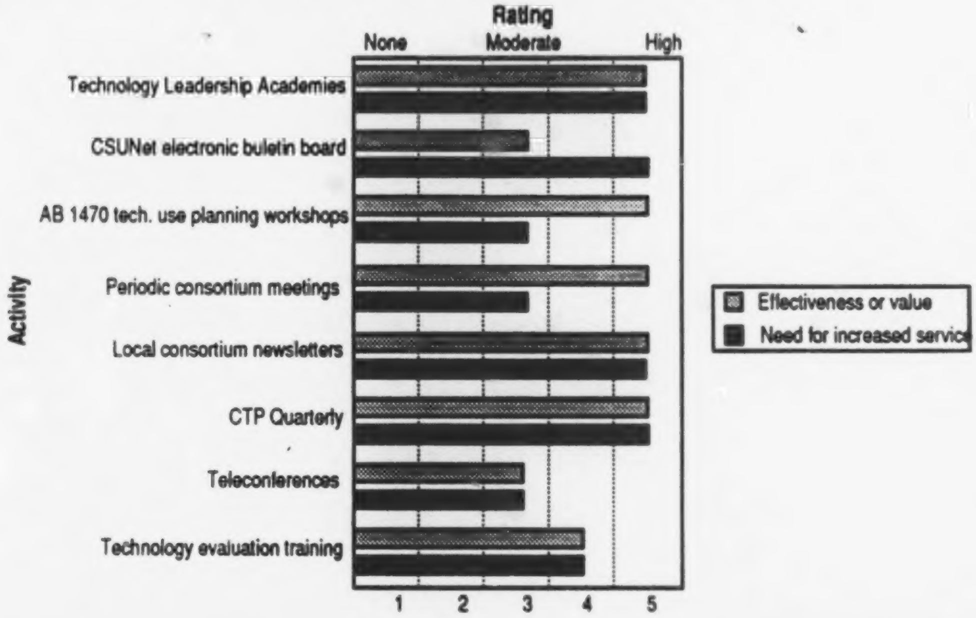
In 1990-91, interaction with the CTP central office and CDE, and the availability of CSUNet were major facilitating factors. Recruiting districts or schools and host agency support were moderate factors in delivering service. Support from membership fees and CTP publication capabilities were slightly facilitating factors. Again, the factor that most impeded service delivery was the geographic size of the service area. Figure 8 shows the level of effectiveness and need for services.

V. Outcomes

A. Impact of Services

The coordinators were asked to rate the effectiveness or value to participants of each service that was offered and to rate the need for increased service in that area. Surveys of participants were used to obtain the ratings for staff development services while comments and staff perception were used to rate the others.

Figure 8 Effectiveness and need for services

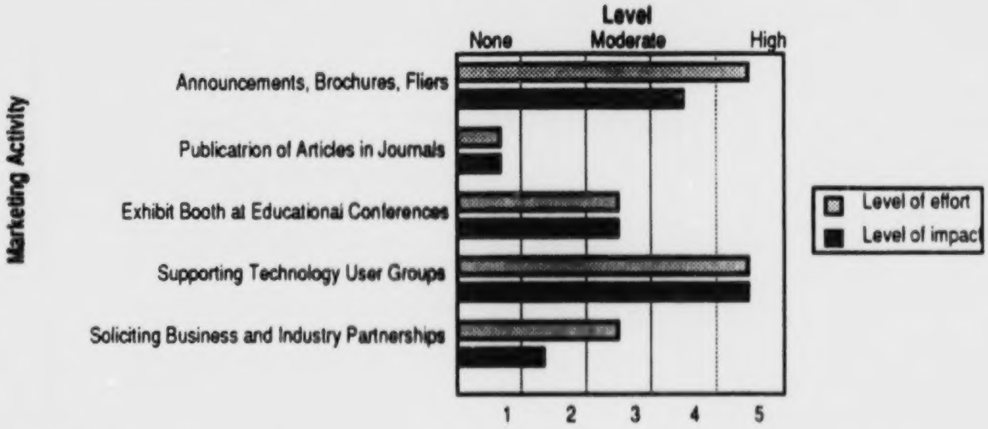


The CTP-initiated activities that seemed to have the greatest benefit in 1989-90 were the AB 1470 grant writing workshops which increased the consortium members chances of getting funded and the summer 1990 TLA which offered opportunity for hands-on use of technology. In 1990-91, TLA subject-based training benefited educators by providing hands on training to 300+ educators. And according to Supertech, very significant changes to schools through AB 1470 activities have resulted from a relatively small amount of grant funding.

B. Marketing Effort and Impact

The Consortium coordinators were asked to indicate the level of effort devoted to different marketing strategies and to rate the level of impact produced by each activity. Figure 9 shows these ratings for the Supertech Consortium.

Figure 9: Marketing Effort and Impact



C. Cost Benefits

The Consortium staff states that funding support, including the state grant and in-kind matching, is adequate for meeting the objectives and expectations of the CTP. They would not have been able to accomplish as much as they had without the existence of in-kind funding and volunteer assistance. The Supertech Consortium would have to discontinue most services if the state CTP funding were terminated. In general, Supertech believes the CTP Consortia model is a cost-effective approach to providing regional support services.

VI. Recommendations

Supertech Consortium staff did not have recommendations for improved services.

Kern County Technology Consortium

I. Background Information

As mentioned earlier, the Kern County Consortia was just getting underway at this time; therefore their self-assessment inventory was completed with data available at the time. The Kern County Technology Consortium is operated out of the Kern County Superintendent of Schools Office, which serves as its fiscal agent. The consortium began operations and became fully operational in May of 1991. It serves a non-specific geographic area consisting of various localities, including Kern County, East Santa Barbara County, and Inyo County. There is no set of membership requirements or fee structure.

The Consortium has an extensive set of bylaws which outline its service area, membership rules, purpose, and organizational structure. The organizational structure includes a Coordinator, a Steering Committee, and a Member Council. The Steering Committee consists of 7 basic member representatives (6 from school districts and 1 from IHE). Steering Committee members and the coordinator are elected by Basic Member Representatives. The Member Council consists of the representatives from each of the Basic Members. The host agency presently views the consortium as an integral part of that agency.

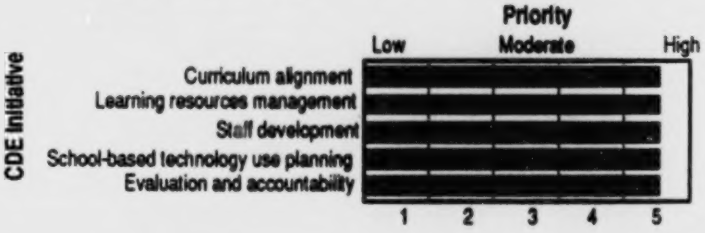
II. Planning

No surveys were conducted during 1990-91 to assess the local needs for CTP services. Kern County plans to conduct them during 1991-92.

No requests for CTP services were noted during the organizational period.

The 1990-91 year was an organizational year for Kern County Technology Consortium. While they did develop an annual plan, they do not have a formal planning group or committee that is separate from the CTP council. Of primary importance were curriculum alignment and staff development. High priority for CDE initiatives was given to curriculum alignment, learning resources management, staff development, school-based technology use planning, and evaluation and accountability. Figure 1 shows the priority given to CDE initiatives.

Figure 1: Priority Given to CDE Initiatives



The plan was used to a significant degree as a working document to guide the day-to-day implementation Data for the priorities assigned to the different CTP services in Kern County's plan were not submitted.

III. Program Content and Implementation

A. Implementation of CTP Objectives

The consortium coordinators were asked to indicate the level of implementation or emphasis of each of the fifteen activities and objectives outlined in the agreements made with the CTP central office. Kern County Technology Consortium had not implemented their plan at the time of this study.

The coordinator spent approximately 15 percent of the allotted time during the 1990-91 school year on overall planning and management, about 60 percent on CTP State and Local Council Meetings, fifteen percent on staff development workshops, and another twenty-three percent on CSUNet and AB 1470 project support. The technical/clerical support staff's time was split evenly between overall planning and management, and CTP state and local meetings. Contract consultants were hired for staff development workshops.

B. Staff Development

Kern County Technology Consortium did not conduct any workshops during 1990-91.

Table 1 lists the number of staff development and awareness publications produced by the Delta Sierra Regional Consortium during 1990-91.

Table 1: Consortium Publications

Publications Produced or Distributed by Project	Number of Publications	Number of Copies Printed
Workshop Schedules	0	N/A
Consortium Newsletters	0	N/A
Announcements, Brochures, Flyers	0	N/A

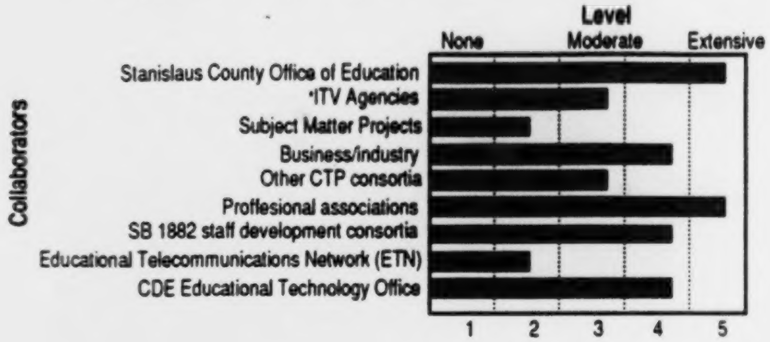
C. AB 1470 Project Support Services

Data was not submitted.

D. Collaboration with Other Agencies

The Kern County Technology Consortium collaborated with a variety of other agencies in 1990-91. Extensive help was received from the County Office of Education and various professional organization. High collaboration was noted with business and industry, SB 1882 Staff Development Consortia, and the CDE Educational Technology Unit. Moderate help was received from ITV agencies, other CTP regional consortia, Subject Matter Projects, and ETN. Collaboration with other agencies is shown in Figure 2.

Figure 2: Collaboration with other agencies



IV. Funding Resources and Constraints

A. Consortium Revenue

No data was submitted.

B. Consortium Expenditures

No data was submitted.

C. Supporting and Impeding Factors

During 1990-91, interaction with the CTP office, the consortium fiscal agent, the California Department of Education, the County Office of Education, technology manufacturers and vendors, business and industry, host agency support, and the availability of CSUNet were all major facilitating factors towards developing a service delivery system. Colleges and Universities were moderate facilitators, while the geographic size of the service area was a slight impediment.

V. Outcomes

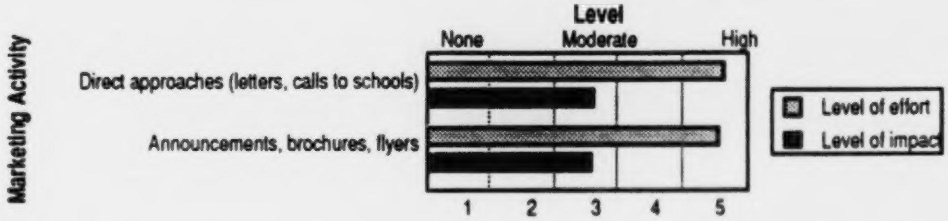
A. Impact of Services

No services were offered during 1990-91.

B. Marketing Effort and Impact

The consortium coordinators were asked to indicate the level of effort devoted to different marketing strategies and to rate the level of impact produced by each activity. Figure 3 shows these ratings for the Kern County Technology Consortium.

Figure 3: Marketing Effort and Impact



C. Cost Benefits

The Kern County Technology Consortium indicates it would not have been possible to establish their consortium without the existence of in-kind funding and volunteer assistance, and that it would not exist without the AB 1470 funding. The CTP would have to discontinue most services if AB 1470 funding were terminated. In general, the consortium feels that for schools, the model is not a cost effective approach to providing regional support services.

VI. Recommendations

The Kern County Technology Consortium recommended the following:

- Coordination with other state programs needs to be formalized, particularly with the California Subject Matter Projects.

Mountain-Ocean-Desert Technology

I. Background Information

The Mountain-Ocean-Desert Technology Consortium (MOD Tech) is operated out of the William S. Hart School District. The consortium began operations in April of 1989 and became fully operational in August of 1989. It serves a non-specific geographical area consisting of various localities: Los Angeles County, Ventura County (part), Kern County (Bakersfield), all of LAUSD, Antelope Valley, Santa Clarita Valley, Culver City, Beverly Hills, and many non-public schools as well. District membership requires a complete needs assessment and a board resolution. There are no fees.

The William S. Hart School District serves as its fiscal agent for banking purposes only. California State Northridge is its host for meeting site and all downlinks. Neither agency has a role in the direction, focus, purpose, or daily management of the project.

II. Planning

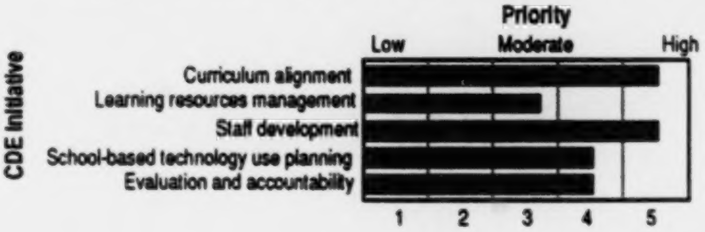
In order to assess the local needs for CTP services, surveys were conducted of Consortium members. Input from the CTP council and the judgement of the consortium organizational steering committee were also used to set priorities for services. The needs most often suggested by the surveys were staff development, the use of new technologies and grant writing skills.

During 1989-90, between 51-100 requests were received for software/video information, and AB 1470 grant application guidelines. Between 26-50 requests were received for AB 1470 project development assistance and ITV staff development assistance. Between 6-10 requests were received for information on technology in the curriculum staff development, as well as 0-5 requests for technology use planning assistance, technical assistance with hardware, and teleconference information.

MOD Tech did not develop an annual plan, nor do they have a formal planning group or committee. Of primary importance were curriculum alignment and staff development. High priority was given to school-based technology use planning and evaluation and accountability, and moderate priority was assigned to learning resources management.

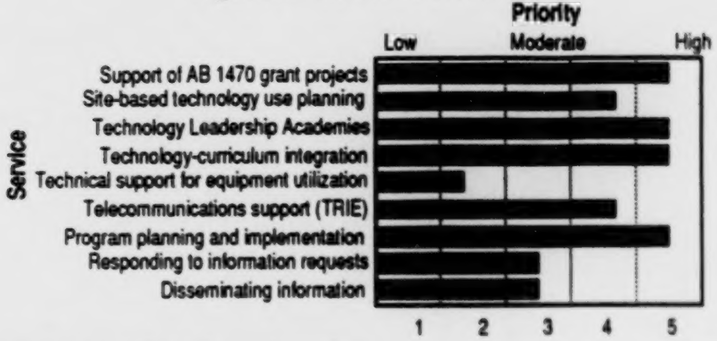
Keeping in mind that 1989-1990 was an organizational year, highest emphasis was given by the Consortium to the support of AB 1470 grant project, Technology Leadership Academies (TLA), technology-curriculum integration, and program planning and implementation. High priority was also given to site-based technology use planning, and telecommunications support. Of moderate priority was responding to information requests, disseminating information, and technical support. Figure 1 shows the priority given to CDE initiatives.

Figure 1: Priority Given to CDE Initiatives



While no annual plan exists, Consortium members do provide input through surveys, council meetings, and other informal input. Figure 2 shows the priorities assigned to the different CTP services.

Figure 2: Service Priorities



III. Program Content and Implementation

A. Implementation of CTP Objectives

The consortium coordinators were asked to indicate the level of implementation or emphasis of each of the fifteen activities and objectives outlined in the agreements made with the CTP central office. Figure 3 shows this information for MOD Tech.

The coordinator spent approximately four percent of the allotted time during the 1989-90 school year on overall planning and management, about twenty percent on CTP State and Local Council Meetings, twenty percent on staff development workshops, twelve percent coordinating with other agencies, and another forty percent on reports, surveys, CSUNet-TRIE, and AB 1470 project support. MOD Tech has no technical/clerical or consultant support.

Figure 3: Implementation and emphasis of CTP activities and objectives

	Level of Implementation or Emphasis					
CTP Activity/Objective	Not implemented or emphasized	Not possible to implement of emphasiz	Not implemented or emphasized in 89-90 but planned for 90-91	Partial implementation or emphasis	Fully implemented or emphasized	Implemented or emphasized beyond expectations
General administration of the Consortium					✓	
Facilitate exchange of information on uses of technology between and among Consortium and other educational groups					✓	
Support effective uses of technology in support of California Curriculum Frameworks					✓	
Ensure that membership, including teachers, have input into governance and planning.					✓	
Send a representative to consortium coordinator's meetings called by the central CTP					✓	
Provide a liaison and coordination between SB 1882 Consortia, County Superintendents, MTS Projects, ITV Agencies, California Subject Matter Projects, and others.				✓		
Promote educational telecommunication use of CSUNet and TRIE					✓	
Assist the state-wide CTP in information collection and dissemination activities				✓		
Provide evaluation data to the CTP central office				✓		
Conduct annual needs assessment/resource identification survey to identify training resources and priorities					✓	
Assist AB 1470 School-Based Grants program by conducting orientation workshops and other support services				✓		
Conduct annual regional CTP Technology Leadership Academy						✓
Conduct locally determined workshops					✓	
Host a downlink site for annual CTP satellite broadcasts as requested					✓	
Submit a "Final Activities Report" to the CTP central office no later than October 15th.		✓				

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B. Staff Development

1989-90
The MOD Tech Consortium conducted several workshops, including a 1-2 day Language Arts TLA and a 2-5 day History/Social Science TLA. Both TLAs attracted 100 participants each. Two video/camera workshops served 46 participants, and a half-day Technology for Teacher Training was attended by 10 people. One 1-2 day and two half-day ITVs attracted 75 participants.

1990-91
Data was not submitted for 1990-91.

Table 1 lists the number of staff development and awareness publications produced by the MOD Tech Consortium during 1989-90.

Table 1: Consortium Publications

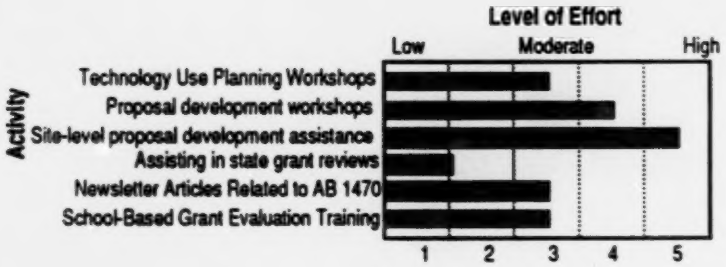
Publications Produced or Distributed by Project	Number of Publications	Number of Copies Printed
TLA Flyers	N/A	6,000
Consortium Newsletters	0	N/A
Announcements, Brochures, Flyers	Monthly	250 each

C. AB 1470 Project Support Services

A variety of support services were provided to AB 1470 school-based projects. In 1989-90, MOD Tech gave much of effort to site-level proposal development assistance, and high support to proposal development workshops. A moderate amount of effort was dedicated to technology use planning workshops, school-based grant evaluation training, and newsletter articles related to AB 1470. Support was also given to assisting in state grant reviews.

Figure 4 shows the level of staff effort dedicated to each of the support services provided by the Consortium.

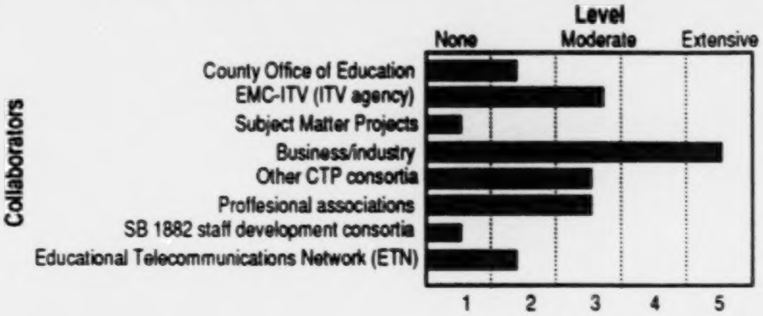
Figure 4: Support for AB 1470 school-based projects



D. Collaboration with Other Agencies

MOD Tech collaborated with a variety of other agencies in 1989-90. Extensive help was received from business and industry through the provision of technology, expertise, and manpower. Los Angeles Unified School District provided release time, assisted in mailings, and lent facilities and support personnel. Moderate collaboration existed with ITV agencies, other CTP Consortia, and professional associations. MOD Tech collaborated less frequently with the County Office of Education, ETN, and the CDE Educational Technology Unit. Collaboration with other agencies is shown in Figure 5.

Figure 5: Collaboration with other agencies



IV. Funding Resources and Constraints

A. Consortium Revenue

1989-90

MOD Tech received $2,200 in funds as direct cash revenue from AB 1470 funds. Only 15 percent of staff time was funded by the CTP grant, with the remaining 85 percent donated by volunteers.

An estimated $18,200 was received from in-kind support from a variety of sources. Most of the support ($10,000) came from the school district as release time, mailings, and equipment use. The equivalent of $5,00 was received business and industry in the form of manpower, labs for TLAs, and training. Another $2,000 came from Colleges and Universities as meeting space and parking allowances. William S. Hart School District donated $1,000 and other CTP consortia donated the equivalent of $200 in the form of mailings and advertisements. Figure 6 shows revenue sources.

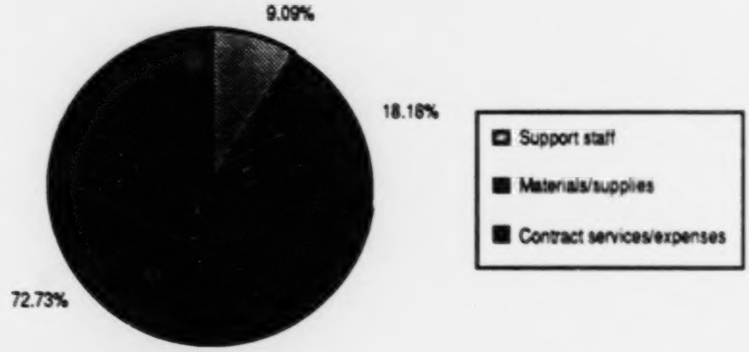
Figure 6: Revenue Sources

	Source	1989-90 Amount	1990-91 Amount
▨	State AB 1470 funds	$2,200	N/A
■	In-kind support	$18,200	N/A
■	Other	N/A	N/A
	Total	$20,400	N/A

B. Consortium Expenditures

For 1989-90, MOD Tech's expenditures were $2,200 which included clerical support, printing, and office supplies. See Figure 7 for consortium expenses.

Figure 7: Consortium Expenses



C. Supporting and Impeding Factors

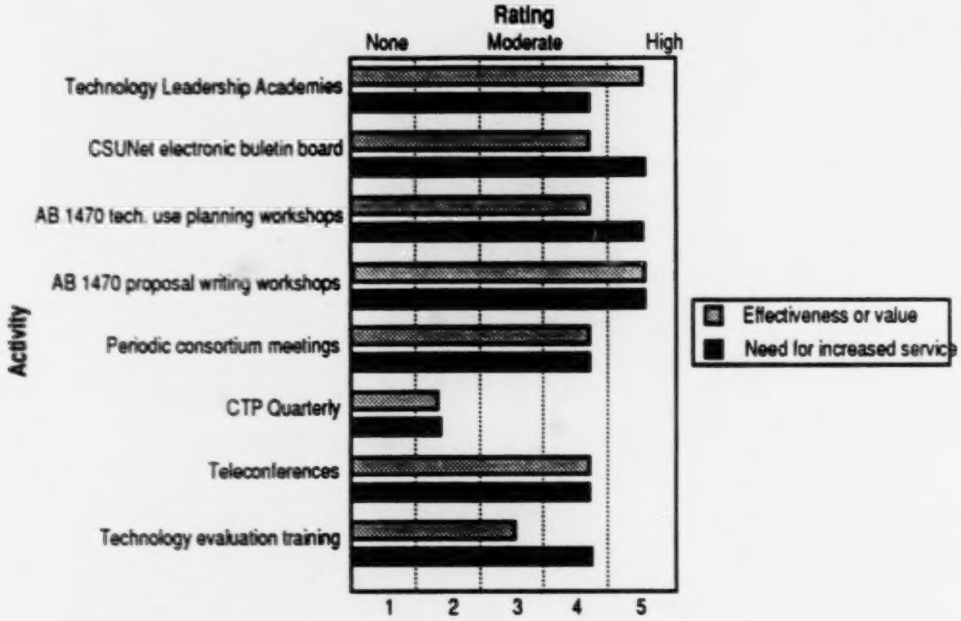
In 1989-90, the factors that most noticeably facilitated the delivery of services were technology manufacturers and vendors, business and industry, and interaction with the CTP office. Colleges and Universities were also slightly facilitating factors. Moderate impediments to service delivery was the lack of available staff or consultants to provide professional development. Major impediments include the geographic size of the service area, and the lack of capability to produce or distribute CTP publications.

V. Outcomes

A. Impact of Services

The coordinators were asked to rate the effectiveness or value to participants of each service that was offered and to rate the need for increased service in that area. Surveys of participants were used to obtain the ratings for staff development services while comments and staff perception were used to rate the others. Figure 8 shows effectiveness and need for services.

Figure 8: Effectiveness and need for services

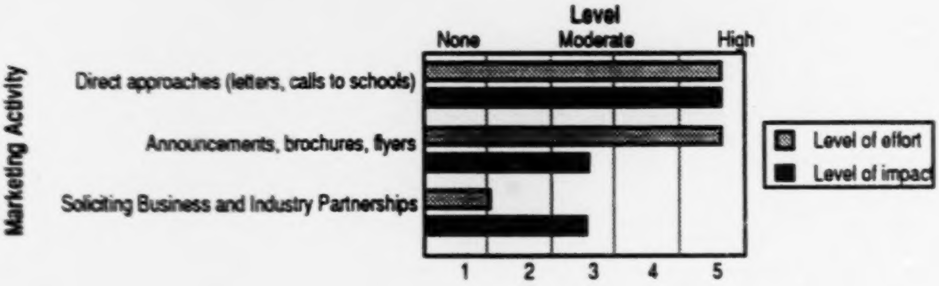


The Coordinator found CSUNet-TRIE, TLAs, and meetings to be of great value. TLAs exposed educators to training and technology, regular meetings facilitated networking.

B. Marketing Effort and Impact

The consortium coordinators were asked to indicate the level of effort devoted to different marketing strategies and to rate the level of impact produced by each activity. Figure 9 shows these ratings for MOD Tech.

Figure 9: Marketing Effort and Impact



C. Cost Benefits

MOD Tech reported that given the objectives and expectations of the regional CTP the funding level for their local consortia is very insufficient. They indicate it would not have been possible to accomplish what they did without the existence of in-kind funding and volunteer assistance. The CTP would have to discontinue some services if AB 1470 funding were terminated. In general, the Consortium states that the model is a cost effective approach to providing regional support services.

VI. Recommendations

The Delta Sierra Regional Consortium recommended the following:

- There should be less reliance on volunteerism.
- More cooperation is needed with County Services.
- Other revenue sources need to be tapped to hire support personnel and coordinators.
- More people need to be involved at all planning levels.

Summary and Conclusions

The following pages describe the findings for the California Technology Project Regional Consortia obtained from the Self-Assessment Survey, the Interviews of 30 sites, the Teacher Survey and the School-Based Grants Self Assessment Inventories. Twelve of the CTP Regional Consortia were started in 1989. One additional consortium was added was added in fall of 1990 and a fourteenth in the spring of 1991. This newest consortium (Kern County) was just getting started as this evaluation study was being conducted and had limited data to contribute to the study.

The categories used in the following pages to summarize the findings for the CTP correspond to the following categories: 1) Background Information, 2) Planning, 3) Program Content and Implementation, 4) Marketing, 5) Evaluation, 6) Resources, 7) Allocation of Resources, 8) CTP Consortium Expenses, 9) Cost Benefits, 10) Factors Facilitating or Impeding Service Delivery, 11) Recommendations and 12) Conclusions.

1. Background Information

An overall understanding of the CTP Regional Consortia demographics provides the context for interpreting the project findings and other information provided in this report. The following provides an overview describing the demographics of the 12 consortia studied.

A. Consortia Demographics

Demographic information was obtained from the Self-Assessments Inventories completed by the consortia coordinators.

Combined, the regional consortia serve the entire state (see the CTP map included in the introduction). Generally, their regional lines roughly follow along county lines, but in some cases, there is overlap. Most often, they serve multiple counties. Each consortia serves different school districts and because of the variation in demographics, some serve rural counties only, some serve suburban counties, some serve urban counties and still others serve a mix of demographic areas. Unlike the previous 17 Teacher Education and Computer Centers (TECCs) which had predetermined boundaries established by the CDE, the areas served by the CTPs are member driven and based on local needs. The smallest number of counties served by a single consortia is one and the largest number of counties is ten. The estimated number of schools served by individual consortia ranges from 300 to 674 as reported by the coordinators.

B. Governance

All of the consortia have bylaws and service agreements with the Central CTP. The relationship between the host agencies and the consortia varies by region, but the coordinators report that they are highly or significantly integrated with the ongoing programs of their host agency.

At this time, nine charge membership fees to support their programs, and three do not.

2. Planning

The successful implementation and maintenance of a project requires careful planning at the regional level with the involvement of the teachers and administrators served by the consortia. Most of the CTPs (ten) develop an annual plan. Ten of the consortia have a formal planning group that is separate from the CTP council. This section describes the planning processes typically used.

A. Needs Assessment

The CTP coordinators were asked to indicate the methods used for assessing the local needs of teachers, administrators and others for CTP services. The data returned indicates that in all cases the CTPs attempt to assess the needs of all clients through a variety of sources.

All of the CTP consortia conduct education surveys of members. Nine of them surveyed administrators, seven of them surveyed teachers and eight of them used additional input from staff judgment, from the CTP council and from other informal sources.

The coordinators were asked which were the five most highly requested needs. In the first year (1989-90) these were technology in the curriculum, administrator training, teacher training, grant writing (including AB 1470 School-Based Applications) and Technology Use Planning.

In the second year the most highly requested needs were technology in the curriculum, administrator and teacher hands-on training, grant writing, AB 1470 School Based Program implementation, technology use planning and multi-media usage.

It should be noted that 1989-90 was the first application year for the AB 1470 School-Based Grants Program which would account for the higher need for grant writing assistance. 1990-91 was the first implementation year which would account for the greater need for assistance with implementation.

There is a great deal of coordination with the host agencies in both planning and delivery of services. Seven of the CTPs report that they coordinate significantly with their host agency staff using existing staff development and technology resources.

The annual plan appears to be well used in guiding day-to-day operations of the CTPs. Seven of the ten consortia which develop annual plans, report that they use the plan significantly for day-to-day activities.

B. Services Priorities

The coordinators were asked to describe their planning process and the extent to which CDE initiatives are considered in the plan development. They also were asked to indicate the emphasis given to major educational and program priorities in the region that were addressed by the CTP consortium.

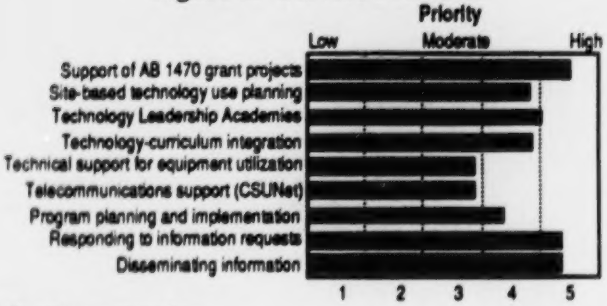
For both 1989-90 and 1990-91, the CTPs gave the same priorities to CDE initiatives in developing their plan. The first priority was for staff development; second was school-based technology use planning; third was curriculum alignment; fourth was evaluation and accountability and fifth was learning resources management.

It appears that this prioritization was then used in developing program service categories. In following the AB 1470 School-Based Grants, and the CDE priorities, the consortia generally followed a pattern of designing their staff development around supporting the planning and proposal writing for AB 1470.

In 1989-90, the highest priority was for support of AB 1470 grant projects; followed by responding to information requests and disseminating information. Slightly lower, but still very highly rated was technology use planning, technology leadership academies (TLAs) and technology-curriculum integration.

In 1990-91, the highest priority was for staff development in support of AB 1470 grant projects, technology leadership academies (TLAs) and responding to information requests; followed by disseminating information and technology-curriculum integration. This is reflective of the schools receiving their AB 1470 grants and needing assistance with implementation and staff development with less emphasis on planning. See Figure 1 for the average level of service priorities.

Figure 1: Service Priorities



3. Program Content and Implementation

In addition to CDE priorities, major educational program initiatives and local needs, the CTPs were expected to address fifteen specific CTP activities and objectives. Each of these activities and objectives were summarized from the agreement made between the CTP central office and the regional consortia.

A. Implementation and Emphasis of CTP Activities and Objectives

Figure 2 below indicates the number of regional consortia that checked each box on the list of 15 major objectives and activities.

Figure 2: Implementation and Emphasis of CTP Activities and Objectives

	Level of Implementation or Emphasis					
CTP Activity/Objective	Not implemented or emphasized	Not possible to implement or emphasize	Not implemented or emphasized in 89-90 but planned for 90-91	Partial implementation or emphasis	Fully implemented or emphasized	Implemented or emphasized beyond expectations
General administration of the Consortium				1	9	1
Facilitate exchange of information on uses of technology between and among Consortium and other educational groups				3	7	2
Support effective uses of technology in support of California Curriculum Frameworks				1	9	2
Ensure that membership, including teachers, have input into governance and planning.				1	9	1
Send a representative to consortium coordinator's meetings called by the central CTP				1	7	5
Provide a liaison and coordination between SB 1882 Consortia, County Superintendents, MTS Projects, ITV Agencies, California Subject Matter Projects, and others.				3	6	2
Promote educational telecommunication use of CSUNet and TRIE			3	6	3	
Assist the state-wide CTP in information collection and dissemination activities		1		4	5	1
Provide evaluation data to the CTP central office			1	5	2	1
Conduct annual needs assessment/resource identification survey to identify training resources and priorities		1		3	5	2
Assist AB 1470 School-Based Grants program by conducting orientation workshops and other support services					7	4
Conduct annual regional CTP Technology Leadership Academy			2		5	4
Conduct locally determined workshops			3	3	5	
Host a downlink site for annual CTP satellite broadcasts as requested			1	2	8	1
Submit a "Final Activities Report" to the CTP central office no later than October 15th.		2	1	3	3	

1989-90 was the start-up year and some of the consortia were not able to implement or emphasize some of the activities and objectives. Two of the consortia were unable to complete their CTP reports on time, one did not conduct a needs assessment and one did not assist in data collection for the CTP Central.

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Areas that were not addressed the first year but were the second year were promotion of telecommunications (2 CTPs), evaluation data to the Central CTP (one CTP), conduct TLAs (2 CTPs), host a teleconference downlink site (one CTP) and submit a final report (one CTP). However, most of the consortia were able to fully implement most activities and many exceeded their expectations.

Coordinators commented on the tremendous breadth of CTP expectations and regional needs and the frustration of not being able to "do it all." One summed it up:

> *"We haven't been able to do everything we were asked. We have a retired teacher who works part-time as our coordinator. All the rest of us are unpaid volunteers. We all have full-time jobs and do our best to keep the CTP going."*

By 1990-91, the reporting consortia were able to fully implement almost all activities and only a few were partially implemented. **Again, it must be remembered that this information was collected prior to the end of the school year so it is possible that there was, in fact, a higher level of implementation than indicated.** One coordinator optimistically commented:

> *"Now that we've done it once, the second year should be easier!"*

B. Professional Development

The coordinators were asked to provide information on the professional development opportunities they provided during each of the first two years. They were asked to include the workshop title, length of time, number of participants, type of workshop, audience and to indicate if there were co-sponsors. They estimated that in 1989-90 approximately 200 workshops were offered state-wide and that over 7,000 educators participated. This is reflective of the number one ranking they gave to the CDE priority of staff development.

Most of the workshops were related to AB 1470, either preparation for the proposal writing or for implementation. The topics focused on the integration of technology into the school plan. There were numerous "hands-on" workshops on the use of technology as well as TLAs which were several days in length and focused in-depth on a curricular area.

Most of the workshops were 1/2 day or less in length which is popular with teachers needing an after-school training. Generally, the staff development activities were co-sponsored by the host agency which is important for in-service credit for participants. University partners also played an important role, particularly in the longer trainings, which were of a length that could earn university credit.

Many of the coordinators indicated that their business and industry collaborators were particularly helpful and generous in this area. Donations of training facilities, loaner equipment and trainers were a frequent contribution.

C. Telecommunications

The CTPs use and promote the use of the Technology Resources in Education (TRIE) electronic information service available through the California State University Telecommunications Network (CSUNet.) Accounts on this system are available free of charge to clients and in most cases the phone charges are low or free. The distance from the user to the nearest CSU determines the phone charges.

The CTP has used TRIE for communication and as an information dissemination vehicle. For example, the AB 1470 Grant Guidelines and workshop schedules were available electronically. Educators can use TRIE to send electronic mail and computer-generated documents to each other, the CTP, the CDE, or anyone else with an account on the system. News and information are available on a variety of subjects, including grant opportunities, technology resources, CDE bulletins, special education, and others. An interactive electronic conferencing feature is also provided.

Because promotion and use of TRIE is a major objective of the CTPs, an assessment of the use, ease of use, cost and other factors identified by clients was conducted by CETAP as part of the evaluation instruments. Users surveyed included CTP coordinators, CTP clients, AB 1470 School-Based Grant sample schools, teachers, and county and district media directors.

4. Marketing

The coordinators were asked to describe the vehicles they used for informing clients of CTP services and to describe the publications they produced. A variety of marketing activities were undertaken to inform potential clients of CTP services. Generally, the greatest level of effort was placed on direct approaches (letters, calls to schools) and announcements, brochures and flyers. These were seen as having the greatest impact.

Overall, those that had used the CTPs had learned of their existence early on. About 85 percent were aware of the CTPs within the first 18 months. Furthermore, over two-thirds (69%) reported that they were aware of the full-range of services the CTP could provide. In the words of one coordinator,

> *"During the past 18 months, CTP has had a very positive effect on promoting the use of technology in the schools."*

Of the recipients of the School-Based Grants, 87 percent were aware of CTP services. And 68 percent had used CTP services in preparation of their proposal.

A. Publication Production

All of the consortia distribute publications from Central CTP, such as the *CTP Quarterly* and also develop their own publications. For both years, they focused on producing workshop schedules, announcements and flyers. Some developed their own regional newsletters. Others included CTP articles in host agency publications.

Less effort was placed on publications in journals and exhibits. These were seen as correspondingly less effective. The primary constraint seemed to be lack of staff time to prepare more in-depth informational sources.

The findings from the assessment of CTP clients concurs with that of the coordinators. The publications were seen as having the lowest impact of informing clients of CTP services.

B. Direct Approaches

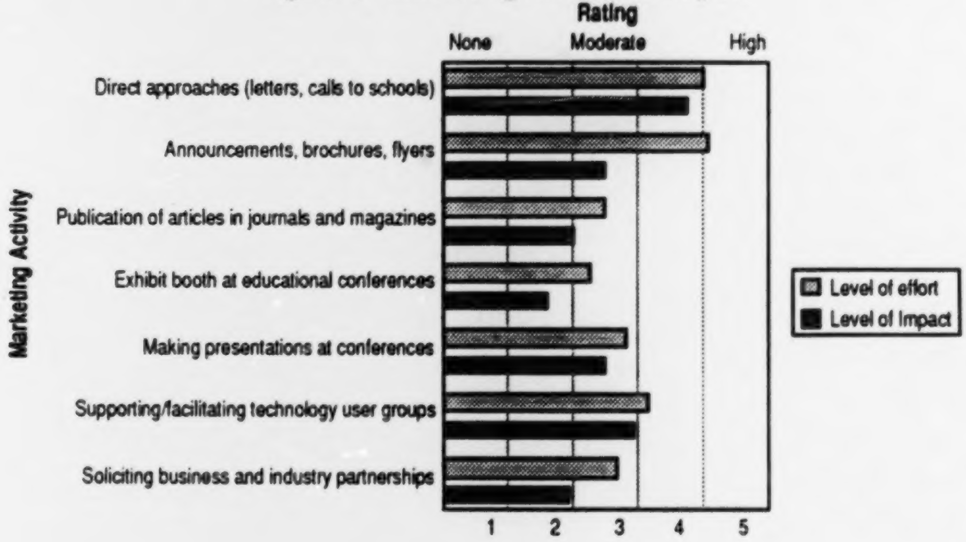
The coordinators reported that they devoted a high level of effort with a corresponding estimated high level of impact in direct contact with clients to inform clients of CTP services. Most of this included letters and personal contact at the schools or districts.

A moderate to high level of effort was placed on making presentations at conferences with an estimated corresponding level of impact. The presentations were both at state-wide and regional conferences in collaboration with professional organizations and their host agencies. The state-wide conferences tended to create a general awareness of the CTPs, while the local or regional conferences were more region-specific.

Supporting technology user groups was another area of emphasis. The level of effort generally was high with regional variations according to available staff. This was seen by the coordinators as an effective vehicle for generating client interest in the CTP.

The findings from the assessment of CTP clients concurs with that of the coordinators. The direct approaches were seen as having the highest impact of informing clients of CTP services. The single exception was the state-level document, AB 1470 School-Based Grant Guidelines, which one-quarter of the respondents said informed them of the availability of CTP assistance. The most frequently mentioned sources of information were 'word-of-mouth' (26%), 'at a conference' (24%,) from the district office (21%) and from the county office (30%). See Figure 4 for marketing effect and impact.

Figure 3: Marketing Effort and Impact



5. Evaluation

The coordinators were asked to indicate how their activities are evaluated. Some activities are evaluated formally, and some are evaluated informally.

There was a fairly consistent pattern of evaluation activity among the 12 consortia. Ten of them formally evaluated the TLAs and AB 1470 proposal writing workshops. Nine formally evaluated the technology use planning workshops. About half formally evaluated their locally initiated services and other AB 1470 assistance. Telephone assistance, publications and on-site technical services generally were not formally evaluated.

To evaluate the overall impact of the CTPs, CETAP measured and analyzed the level and nature of client requests for services, based on statistical data submitted by the coordinators; an assessment of the impact of CTP services made by the coordinators; and an assessment of the services used and their values to clients. This latter data was collected from a sampling of clients who completed a CETAP Assessment of Services questionnaire.

A. Service Requests

Service requests are an important indicator of the impact of the marketing efforts as well as the value placed on the services offered by the CTPs. The coordinators were asked to estimate the number of requests they received for services in eight categories. Figure 4 below shows the number of CTPs reporting estimated numbers of requests in each category.

Figure 4: Service Requests

Service Offered	**Estimated Number of Requests**					
	0-5	6-10	11-25	26-50	51-100	Over 100
Project development assistance (AB 1470)		2		3	4	4
Technology use planning assistance - school district			2	4	3	3
Software/video information/questions		1	1	1	2	7
Technical assistance with hardware	1		2	1	2	6
Information about AB 1470 Grant Application Guidelines		1	1		2	8
Teleconference information	1	1	4	3	3	
Technology in the curriculum staff development	1		2	3	3	3
ITV staff development	2	1	3	1	1	1

In 1989-90 the overwhelming greatest need was for information about AB 1470 Grant Application Guidelines. Eight CTPs each had over 100 requests, two had 51-100 and two had fewer requests. AB 1470 Project Development Assistance was also highly requested. Four CTPs had over 100 requests, four had 51-100 and three had 26-50. The other areas of high need included technology use planning, software/video information, hardware assistance and technology in the curriculum staff development.

In 1990-91, the highest requests for service were in the areas of software/video information, hardware assistance and technology in the curriculum staff development. AB 1470 project assistance and technology use planning were slightly less requested. The coordinators were reporting these estimates prior to the end of the school year and therefore the figures are not reflective of the volume of requests for the entire school year.

In both years, lowest levels of requests were for ITV staff development and teleconference information. This is most likely because the schools are accustomed to receiving ITV assistance through their regional ITV agency and/or county office media center. Teleconferences are accessible to staff who can be released from their work sites which makes them inaccessible for many school site teachers and administrators.

B. Coordinators' Assessment of Impact of Services

The coordinators were asked to rate the level of value or effectiveness of nine primary activities as well as the need for increased services.

In 1989-90, the highest value was placed on the TLAs and the AB 1470 proposal writing workshops. The highest need for increased services was placed on expansion of the TLAs and, in looking ahead to AB 1470 project implementation, for evaluation training. AB 1470 technology use planning workshops and proposal writing workshops were seen as needing a fairly high level of increase.

1990-91 findings were similar. The highest valued service was the TLAs with a corresponding high level of increased need for service. One coordinator shared,

> *"The TLAs allowed our district and county office curriculum and instruction staff to be exposed to the latest technology and how the technology supports student learning."*

C. Client Assessment of Impact of Services

The clients were asked to rate the level of value or effectiveness of nine primary activities and to indicate whether they participated. The highest attendance was generated by AB 1470 Proposal Writing (57%), TLAs (55%) and technology use planning (53%).

The clients rated the value of service on a scale of 1-5. They concurred with the coordinators and placed, the highest value on the TLAs (4.4) and the AB 1470 proposal writing workshops (4.2). In addition, the clients placed high value on telephone assistance (4.3), AB 1470 Project Evaluation workshops (4.1) and on-site technical assistance (4.1). Many particularly like administrators' workshops,

> *" The Administrators' Academy provided an introduction to the power of technology in a non-threatening way."*

D. Client Assessment of AB 1470 School-Based Grant Services

One major objective of the CTPs is to provide regional assistance in the development and implementation of AB 1470 grants as well as to assist at the state level in proposal reading. Because this is a major objective, CETAP asked the clients to respond to several questions addressing AB 1470 as a separate category of services in addition to questions on overall CTP services.

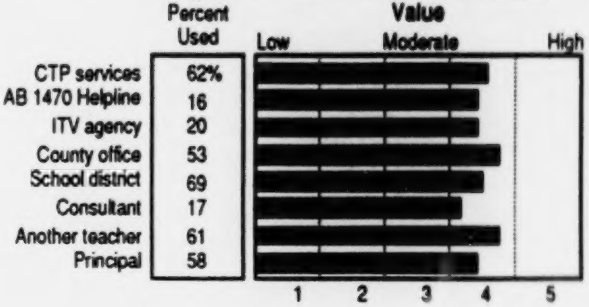
> *"I had a good relationship with my CTP.....helping them read the grants gave me a clear picture of what needs to be done!" (an MTS Level II director)*

A clear pattern of positive impact by the CTPs on bringing educational technology into the schools emerges. Fifty-eight percent of the clients responding stated that their schools were recipients of AB 1470 grants. Of these, 86 percent reported that they had been assisted by the CTP either individually or through a workshop. This figure corroborates with the survey of schools that received School-Based grants which indicated that 81 percent had attended the workshops. About half of these teachers had used the CTP for materials and information.

> *"We found that our county had the highest percentage of outstanding AB 1470 School-Based Grants. We attribute this to the proposal writing workshops."*
>
> *"We found that the technology use planning process provides us with a structure."*

These same clients placed a high value on the services received and their responses indicate a pattern of working in collaboration with colleagues and service providers. Figure 5 below indicates the sources of assistance and the satisfaction level rated on a scale of 1 - 5.

Figure 5: Sources of Assistance



F. TRIE (CSUNet)

The coordinators reported that TRIE was given a moderate-to-high level of emphasis in their annual plan development. However, when implementing their plans, it was given a low level of emphasis. This discrepancy may have been tempered by the value placed on TRIE by the coordinators which is moderate. The clients use TRIE for electronic mail primarily.

When clients were asked about TRIE, about one-third had used it and they placed a low moderate value on the service. Of those who do use the system, less than half use it more than once a month. Part of this may stem from a rating of slightly less than average ease of use. Another factor may be the overall low level of use of telecommunications by these clients. When asked what other telecommunications systems are used the highest ranked system was FrEDMail which garnered 18 percent of the clients.

When analyzing the responses from schools that had received School-Based Grants, only 13 percent had used TRIE .

To assist the CTP in expanding the use of TRIE-CSUNet, CETAP assessed non-users of the system to determine the services they would like to see offered. The CETAP *CTP Assessment of Services Survey* was used to determine the perspective of potential users of TRIE. These current non-users identified the following services: information about technology grants (20%), information about how other schools use technology (28%) reviews of educational hardware and software (24%), staff development announcements (24%), educational information databases (ERIC, Dialog) (22%), information about model programs (adopt/adapt) (21%), electronic mail (19%), technical support (17%), and bulletin boards (15%). TRIE already provides all of these services, so there is an information gap between TRIE and non-users.

6. Resources

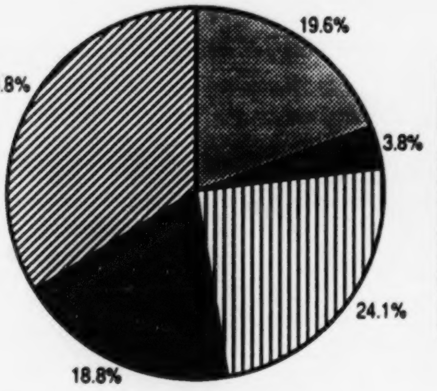
Each consortia received state AB 1470 funding which served primarily as seed money for basic services. Each agency contributed matching support to varying levels. In addition, the CTPs were encouraged to generate other local revenues through such sources as membership fees, sales of publications and training fees. In addition to cash support, there was a high level of in-kind support from host agencies, business and industry partners and volunteers.

The coordinators were asked to report their revenue and in-kind support as well as their expenses on a standardized form developed by CETAP which corresponded to the state accounting budget categories. Many of the regional consortia were unable to provide the information in all categories with the level of preciseness hoped for. So there is no accurate data to report on the state-wide levels of support generated through the regions.

There was a clear pattern, however, from those who did have the information that indicated a higher level of support in cash contributions and fees than provided in the basic state. Thus, the state AB 1470 "seed" funding appears to have "leveraged" significant support from other sources.

The San Diego Consortium was able to provide detailed information on their revenue sources. While this is not to be construed as a "typical" example, it is illustrative of the impact of the state grant on leveraging local resources. As shown in Figure 6, the state grant leveraged over 300 percent in other funding:

Figure 6: Revenue Sources - San Diego Consortium



Expenditure	Amount
▩ State AB 1470 funds	$26,000
■ Workshop fees	$5,000
▥ Membership fees	$32,000
■ SD COE Lottery funds	$25,000
▨ In-kind support	$45,000
Total	$133,000

A. Estimated In-Kind Support

The coordinators were asked to indicate the level of in-kind support received by the consortium from a variety of identified sources and then were asked to provide an example of each type of support source. State-wide, it is estimated that in excess of $300,000 of in-kind support is generated annually for the regional consortia. CSU also indirectly provides in-kind support to consortia -- CSUNet/TRIE, CTP secretary, and office space. The coordinators were clearly cognizant and appreciative of the significant impact these contributions had on their programs.

> *"The support we got from the county office, the districts and the vendors has been invaluable. Their support significantly upgraded the quality of our presentations."*
>
> *"A tremendous number of people volunteered their time to make this happen."*

Examples of in-kind support included:

- Office space and use of equipment and furnishings
- Training facilities
- Loaned equipment for training
- Printing services
- Workshop materials
- Door prizes
- Publicity
- Donated staff to serve as presenters and trainers
- Conference facilities
- Loaned software for trainings
- Participation as co-sponsor of workshop
- Workshop refreshments
- Consulting time
- College course credit

7. Allocation of Resources

A. Consortium Staff Activity

The coordinators were asked to estimate the amount of staff time allocated to various activity categories. Because there was so much variation in the categories of staff and volunteers, the allocation of coordinators' time will be reported here.

For 1989-90, the greatest priority for coordinators' time went to overall planning and management. Ten of the twelve coordinators reported that from 20 percent to 78 percent of their time fell into this category. Staff development and workshops took from 7 percent to 28 percent of their time and AB 1470 project support took 17 percent to 25 percent of their time. Fourteen to 20 percent of their time was spent at state and regional CTP meetings. Most consortia had assistance from volunteers and consultants for staff development activities. Coordination with other agencies, reports and CSUNet and TRIE were given less emphasis.

For 1990-91, the greatest priority for coordinators' time went to overall planning and management. The six reporting coordinators reported that from 12 percent to 80 percent of their time fell into this category. Staff development and workshops increased and required from 12 percent to 35 percent of their time while AB 1470 project support, again, took 17 percent to 25 percent of their time. Fourteen to 15 percent of their time was spent at state and regional CTP meetings.

B. Funding for Consortium Staff Activity

The coordinators were asked to consider the total scope of CTP activities for each of the first two years of operation and to estimate the percentage of staff time funded by the CTP grant, by volunteers and by the host agency. The 1989-90 averages were: CTP grant 30 percent, host agency funded 23 percent and volunteer time 37 percent. One consortia, San Diego, estimated that 36 percent of their staff time was funded by membership fees.

These are state-wide averages and must be considered in the context of tremendous regional variation. Reported below is the state wide average, and then the range of support from the lowest to the highest reported.

Category	Average	Low	High
AB 1470 Grant	30%	5%	85%
Host Agency	23%	0%	80%
Volunteers	37%	0%	90%

In 1990-91, the findings were similar with a slight increase in volunteer time and a decrease in host agency support.

Category	Average	Low	High
AB 1470 Grant	32%	0%	65%
Host Agency	22%	0%	30%
Volunteers	46%	20%	95%

C. Support for AB 1470 School-Based Projects

One major objective of the CTPs is to provide regional assistance in the development and implementation of AB 1470 grants as well as to assist at the state level in proposal reading. Because this is a major objective, the coordinators were asked to estimate the level of staff effort dedicated to each of the main categories of activities supporting AB 1470 School-Based Projects.

In 1989-90, the highest levels of support were for proposal development workshops; followed by assisting in state grant reviews, technology use planning workshops and finally site-level proposal development assistance. Other assistance was provided through newsletters and school-based grant evaluation training. Some of the CTPs established telephone "helplines" to assist schools with their AB 1470 Cycle I and II proposal writing.

In 1990-91, the emphasis shifted as schools received their funding and needed support with implementation. The highest level of support was for technology use workshops and school-based grant evaluation training.

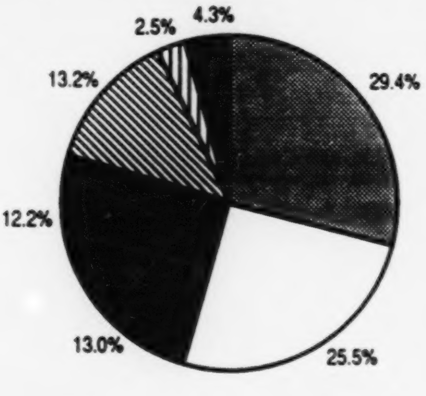
8. CTP Consortium Expenses

The coordinators were asked to report their expenses based on available cash revenue on a standardized form developed by CETAP which corresponded to the state accounting budget categories. Many of the regional consortia were unable to provide the information in all categories with the level of preciseness hoped for.

There was a clear pattern, however, from those who did have the information that indicated a higher level of expenditures in staffing and consultant support, with a lower level of expenses in materials. Generally, minimal amounts were spent on hardware.

The San Diego Consortium was able to provide detailed information on their expenses, as shown in Figure 7. While this is not to be construed as a "typical" example, it is illustrative of how the cash contributions support the CTP efforts.

Figure 7: Expenses - San Diego Consortium



Expenditure	Amount
▨ Professional staff	$21,580
☐ Support staff	$18,733
■ Staff Benefits	$9,551
■ Materials/supplies	$8,932
▧ Contract services/ expenses	$9,688
▥ Indirect costs (7.39%)	$1,800
■ Technology hardware	$3,221
Total	$73,505

9. Cost Benefits

The coordinators were asked to evaluate the cost-effectiveness of the CTP consortia in terms of level of state funding, in-kind and volunteer support, leveraging of funds and overall cost effectiveness.

The findings from both years were essentially the same. Given the objectives and expectations of the CTP Regional Consortia, the funding level was rated as insufficient. However, the funding was enough to leverage the acquisition of other funding sources.

The coordinators were unanimous in their assessment that they would have been unable to accomplish the objectives of the CTP without the existence of in-kind and volunteer support. Most believed that the

AB 1470 funding served as leverage in attracting in-kind and volunteer support. They agreed that some to most services would be discontinued if the state funding were lost. The coordinators felt that the CTPs were a cost-effective delivery system of regional services, but that there needed to be increased state support.

The clients concurred and almost two-thirds stated that they believe the CTP is a cost-effective system of delivering services. Only 6 percent of the 275 clients surveyed did not believe that it is cost-effective. About one-third said they needed more information to answer the question.

> *"We use the CTP. We publish in their journal and use CSUNet. I recommend them to my schools. It is much less expensive." (from a MTS Level II director)*

A. Collaboration with Other Agencies

Coordination and collaboration that occurs among the various state initiated regional service providers is vital to the success of the CTP and is another way that the CTP can leverage resources, thereby increasing their cost effectiveness. The coordinators were asked to indicate the level of collaboration with other regional service providers, professional organizations, business and industry, and the CDE.

In 1989-90, the highest level of collaboration was with the county offices of education which served as host agencies for the consortia. With regional variation, there was an overall moderately high level of collaboration with the ITV agencies. Considering regional variation, there was generally a moderate level of collaboration with the subject matter projects, business and industry, other CTP regional consortia and the professional organizations. CUE was the most frequently mentioned professional organization collaborating with the CTPs.

The level of collaboration with the SB 1882 Regional Staff Development Consortia, Educational Telecommunications Network (ETN), and the CDE could best be described as uneven across the state and may be more reflective of local needs and resources.

> *"We were able to work extensively with the CTP. We put on summer institutes together. We worked together to put on the grant-writing workshops. We are on many of the same committees. We probably work more closely with the CTP than the others." (an MTS Level II director)*

In 1990-91, the findings were similar except that there was a higher degree of collaboration with the CDE Office of Educational Technology.

> *" One of the more effective things the state has done. We're more effective working together. Things tend to become autonomous and isolated. Coordination aids us in being cooperative and working together" (an MTS Level II director)*

10. Factors Facilitating or Impeding Service Delivery

A. Coordinators' Responses

The coordinators were asked to review fifteen factors and identify which were facilitating and which were impeding factors in their service delivery. With some regional variations, there was general consistency state-wide as to which were facilitating and which were impeding. Sometimes, a factor was considered an impediment by almost all regions but for widely differing reasons.

For example, geographic size of region, was generally an impediment. Urban areas commented that even though their square miles were relatively small, the travel time was long due to impacted traffic conditions. Rural areas noted that the large geographic sizes were a problem for travel. In this case travel time was long because the distances were great. Mountainous areas had difficulty with travel as well as telecommunications, with many areas blacked out from reception.

> *"Our county serves both urban and rural schools. The geography does not allow the rural schools to attend many of our workshops."*

Another impeding factor, although to only a slight degree was responsibility for recruiting schools for membership. The coordinators reported that this activity, which was generally a fiscal necessity, took time away from the delivery of services which is their primary mission.

Supporting factors included relationships with their county offices of education, the host agency and universities and technology vendors. These supporters provided staff development, many in-kind services, technical expertise and support in planning and management of the programs. The CTP Central Office and the CDE facilitated the efforts, again with resources and expertise. The availability of CSUNet and the capability for the production and distribution of publications was seen as important facilitating factors to the goals of the CTPs.

> *"Central CTP provides a quick response when we call for help."*
>
> *"Craig and Peggy have gone above and beyond the call of duty."*
>
> *"I appreciated that the CDE was always there when I called for help."*

B. Client Responses

The clients were asked to identify strengths and weaknesses of the CTP. They were strongly favorable in their responses (70% responded) and saw relatively few areas for improvement. (54% responded.)

While the coordinators saw geographic size as an impediment, the clients did not. Only 8.7 percent identified travel time as a constraint. It must be remembered that this response is from clients who actually used the CTP and they may not have been considering the overall regional needs.

While the coordinators saw that marketing took time away from serving clients, this was the highest rated need as seen by client users (13%) who believe that more marketing or visibility is needed. The clients believe that there is a need for better coordination among service providers and that more funding needs to go into the CTP efforts.

The trainings, workshops and TLAs received the highest rating (36%) from the clients, closely followed by 34 percent who valued the networking opportunities with colleagues and communication within the region.

11. Recommendations

The coordinators were asked in an open-ended response format to recommend changes for next year. Clients also were given the opportunity to make suggestions. Following are the major recommendations submitted by coordinators and clients:

Organization:

- Keep it the way it is!
- Maybe we should re-think our our regional boundaries.

- Maybe we should have sub-regions to cut down on the travel.
- Let's have northern California and southern California regional meetings so we can meet and share ideas and learnings.
- Flexibility works!
- Eventually we need to work towards more, smaller regions.
- Increase district involvement. (client)

Service delivery:

- We need more professional productivity workshops for teachers and administrators.
- We need more time to prepare.
- The state should not add duties once a plan has been delivered.
- Business and industry will have to support our efforts. The state cannot do it alone.
- More workshops are needed. (client)
- Educate the district administrators on technology use. (client)
- Provide more year-round training. (client)

Coordination and collaboration:

- The coordination with other state programs needs to be established at the state level first. Then, regionally we can create local partnerships.
- Other state projects need to learn how to incorporate technology into the curriculum.
- The CTP is a vehicle for pulling together the pieces. It connects the various agencies.
- We all need collaboration training and support.
- We have three California Writing Project trainers on our council. This has been a great asset.

Evaluation:

- We need better evaluation of the impact of technology on student learning.
- We need more evaluation on the value of technology in the schools.

TRIE:

- TRIE costs most of our members long distance charges.
- Provide more useful information. (client)
- Make it easier to use. (client)
- Add more local access numbers or provide an 800 number. (client)

12. Conclusions

"Pulling together the pieces" is the motto of the California Technology Project, and the state-wide effort has successfully implemented the project in a short period of time. The CTP has achieved its four major goals of state-wide leadership and support for the Regional Consortia, data collection, information dissemination and staff development to affect the use of technology in California's schools. Working with minimal budgets, the regional consortia have effectively leveraged resources to train and support educators in their efforts to infuse technology into the curriculum. The Central CTP has facilitated the work of regions and conducted state-wide activities that would have been beyond the reach of any local endeavor.

A review of the data collected from and about the CTP yields the following conclusions:

1. The CTP has been a cost-effective vehicle for supporting and enhancing the integration of technology into the curriculum in order to improve teaching and learning. A tremendous amount of activity has been generated at the central and local levels. The focus on technology would not have been as strong or effective without the concerted effort of the CTP. The regions in particular have leveraged their dollars to achieve an impressive array of staff development offerings and services.

2. The CTP has made information about technology and support for its integration into the curriculum accessible throughout the state. Although discrepancies still exist between rich and poorer districts, rural and urban districts, individual schools which have or lack the talents of an informed and experienced technology leader, the CTP has increased the opportunity for educators to learn and grow in their educational technology skills.

3. Educational technology remains out of reach of many California schools, and assistance will be needed if progress is to be made. The CETAP has revealed an urgent need throughout the state for more money, more training, more equipment and materials, and models and guidance to effectively integrate technology into the curriculum. Many schools do not have access to technology. Many other educators are frustrated by the inadequate availability of technology at their schools. Still others expressed frustration over the lack of funds for upgrades and maintenance.

4. The geographic size of the regions was an impediment to the CTP efforts. Both CTP staff and users commented on the problems of traveling to CTP activities. In less populated regions of the state, the distances are great. In the metropolitan areas, the distances are short, but the traffic congestion becomes a significant time factor.

5. Regional consortia appreciated the support and guidance they received from the Central CTP.

6. The host agencies facilitated the work of the regional consortia. Many consortia directors commented on the support and contributions of the host agency.

7. The CTP has significantly expanded the number and competence of California educators who can serve as leaders and models of effective educational technology use in their schools and districts.

8. Telecommunications continues to hold promise for a cost-effective way of delivering training, technical assistance and information. In order for schools to have full access to a state-wide telecommunications system, the system needs to become easier to access and provide more information of interest to clients. Fiscal obstacles include lack of dedicated phone lines, lack of modems, and phone usage charges.

Appendix A:

California Technology Project Assessment Instruments

- Self-Assessment Inventory
- Assessment of Services
- Telephone Survey
- Staff Development Evaluation Form

Far West
LABORATORY

SAMPLE

Date: January 28, 1991

To: CTP Coordinators

From: John Cradler
California Educational Technology Assessment Project

Re: Revised CTP Consortia Self-Assessment for 1989-90

Enclosed is your copy of the revised 1989-90 CTP Consortia Self-Assessment inventory. We thank you for your reviews of the draft version; your suggestions and others have been incorporated into this edition. The survey is part of the documentation that will serve as your Annual Evaluation Report and provide information for the statewide evaluation of AB 1470. As you know, the latter is being conducted by Far West Laboratory for Educational Research and Development under the project title *California Educational Technology Assessment Project* (CETAP).

The importance of the report derived from the data you provide cannot be overemphasized. The evaluation report will help to inform decision-makers about CTP and CETAP will include many recommendations that may influence the future of CTP.

The information provided by the 1989-90 inventory along with other information will be used in the development of an interim report on the CTP for the April, 1991 *Educational Technology Summit Conference* in Sacramento.

Please enter as much of the information as possible and mail the completed document to Far West Laboratory by February 22nd, 1991.

You will again be completing this inventory to describe CTP activities for 1990-91. The deadline for the 1990-91 inventory will be June 30, 1991. This will provide the CETAP with data that will be incorporated into the August draft of the state-wide evaluation report.

Your cooperation in providing this valuable information is much appreciated.

If you have any questions about any of the revised questionnaire items, or need assistance, please call (415) 344-7046 or (415) 565-3018.

Far West Laboratory For Educational Research and Development
730 Harrison Street San Francisco, CA 94107-1242 (415) 565-3000 FAX (415) 565-3012

California Technology Project Regional Consortia
SELF-ASSESSMENT INVENTORY

California Department of Education and Far West Laboratory for Educational Research and Development

For each item provide data about the ________ fiscal year (July 1 to June 30). Also, describe major changes **anticipated and now underway** during the **next year** fiscal year. Please be as accurate as possible and don't hesitate to call for assistance. Thank you for taking the time to provide this information.

I. BACKGROUND INFORMATION

1. **General Information.**

Consortium Name: ______________________________

Fiscal Agency (LEA): ______________________________

Mailing Address: ______________________ City: ______________ ZIP: __________

Person(s) providing information: ______________________ Title(s) ______________

Telephone: (_____) ______________

2. **Implementation Schedule.**

Starting date of consortium .... ___/___/___

Date the consortium was fully operational .... ___/___/___

3. **Bylaws.** Does the consortium have a set of bylaws (circle one):

Yes 1
No 2

If yes, please attach a copy to the completed survey.

4. **Organizational Structure.** Briefly describe the organizational structure of the consortium (include Fiscal Agent and/or host agency, governance (council, board, etc.), department of the local education agency to which CTP Consortium is assigned, reporting structure, etc.) Please attach any relevant documentation (organization charts, etc.)

Description:

next year changes:

5. **Relationship with Host Agency.** To what extent does the host agency presently view the consortium as an integral part of that agency (circle one):

	Not at All		Moderately		Significantly
agency (circle one):	1	2	3	4	5

6. **Consortium Membership.** Were there any consortium membership requirements or fee structures established for the year assessed(circle one):

Yes 1
No 2

If yes, describe:

next year changes:

7. **Service Area.** Does the consortium serve a specific geographic area (circle one):

Yes 1
No 2

If yes, describe the geographic area that is served by the consortium. If no, describe the area that is *generally* served by the consortium.

Number of counties: .... #________

List all counties (or parts of counties) served:

Other relevant information:

next year changes:

8. **Consortium Services Provided.** Complete the table below as follows:

- Estimate the number of individuals, schools, and education agencies that are in the consortium's service area.
- Estimate the number that can potentially and realistically benefit from its services:

	In Area*	**Estimated Number to Benefit**
Teachers	▨	
Administrators	▨	
Schools		
School Districts		
Colleges and Universities		
Other:________		
Other:________		

* Check the *California Public Schools Directory* for data.

next year changes:

II. PLANNING

1. **Needs Assessment.** Indicate the methods used for assessing local needs of teachers, administrators, and others for CTP services (circle all that apply):

Survey of teachers in area 1
Survey of administrators 2
Survey of consortium members 3
Input from the CTP council 4
CTP staff judgement 5
None of the above 6
Other (describe):______________________ 7

If needs assessment data are available, list the three needs most often suggested:

1. ______________________
2. ______________________
3. ______________________

next year changes:

2. **Service Requests.** Estimate the number of requests from clients or members for CTP services in each of the following areas (circle the appropriate letter in the scale for each item or write in the exact number, if known):

Service Offered	Estimated Number of Requests						
	0-5	6-10	11-25	26-50	51-100	Over 100	Exact #
Project development assistance (AB 1470)	A	B	C	D	E	F	
Technology use planning assistance - school district	A	B	C	D	E	F	
Software/video information/questions	A	B	C	D	E	F	
Technical assistance with hardware	A	B	C	D	E	F	
Information about AB 1470 Grant Application Guidelines	A	B	C	D	E	F	
Teleconference information	A	B	C	D	E	F	
Technology in the curriculum staff development	A	B	C	D	E	F	
ITV staff development	A	B	C	D	E	F	
Other (list):	A	B	C	D	E	F	
	A	B	C	D	E	F	
	A	B	C	D	E	F	
	A	B	C	D	E	F	

Comments:

next year changes:

3. **Planning Procedures.**

a. Does your consortium develop an annual plan (circle one):
Yes 1
No 2

b. Does your consortium have a formal planning group or committee that is separate from the CTP council (circle one):
Yes 1
No 2

c. To what extent were CDE initiatives considered when the plan was developed (circle one for each item):

CDE Initiative	Priority				
	Low		Moderate		High
Curriculum alignment	1	2	3	4	5
Learning resources management	1	2	3	4	5
Staff development	1	2	3	4	5
School-based technology use planning	1	2	3	4	5
Evaluation and accountability	1	2	3	4	5

	Not at All		Moderately		Significantly
d. To what extent is the consortium plan used as a working document to guide the day-to-day implementation (circle one):	1	2	3	4	5

e. Do any users of your consortium's services provide input to the annual plan (circle one):
Yes 1
No 2

If yes, indicate how they are able to provide input (circle one):
Survey 1
Consortium council meetings 2
Informal input 3
Other:________________ 4

	Not at All		Moderately		Significantly
f. To what extent is the planning of consortium activities coordinated with those of the host agency staff - e.g.. existing staff development and technology resources (circle one):	1	2	3	4	5

4. **Services Priorities.** Indicate the emphasis given to major educational and program priorities in the region that were addressed by the consortium during the year assessed (circle one for each item):

Need	Priority				
	Low		Moderate		High
Support of AB 1470 grant projects	1	2	3	4	5
Site-based technology use planning	1	2	3	4	5
Technology Leadership Academies	1	2	3	4	5
Technology-curriculum integration	1	2	3	4	5
Technical support for equipment utilization	1	2	3	4	5
Telecommunications support (CSUNet)	1	2	3	4	5
Program planning and implementation	1	2	3	4	5
Responding to information requests	1	2	3	4	5
Disseminating information	1	2	3	4	5
Other priorities (list):________________	1	2	3	4	5

III. PROGRAM CONTENT AND IMPLEMENTATION

1. **Implementation and Emphasis of CTP Activities and Objectives.** Each of the activities and objectives listed on this table were summarized from the agreement made between the CTP central office and the regional consortia.

- Rate each activity or objective by circling the appropriate letter:

A = Not implemented/emphasized
B = Not possible to implement/emphasize
C = Not implemented/emphasized during 1989-90 but planned for next year
D = Partial implementation/emphasis
E = Fully implemented/emphasized
F = Implemented/emphasized beyond expectations

- Use the space provided to list major local objectives and activities.
- Comment on each activity if *not implemented/emphasized, not possible to implement* or if *implemented/emphasized beyond expectations.*

CTP Activities/Objectives

1. General administration of the Consortium	A	B	C	D	E	F
2. Facilitate exchange of information on uses of technology between and among Consortium and other educational groups	A	B	C	D	E	F
3. Support effective uses of technology in support of California Curriculum Frameworks	A	B	C	D	E	F
4. Ensure that membership, including teachers, have input into governance and planning.	A	B	C	D	E	F
5. Send a representative to consortium coordinator's meetings called by the central CTP	A	B	C	D	E	F
6. Provide a liaison and coordination between SB 1882 Consortia, County Superintendents, MTS Projects, ITV Agencies, California Subject Matter Projects, and others.	A	B	C	D	E	F
7. Promote educational telecommunication use of CSUNet and TRIE	A	B	C	D	E	F
8. Assist the state-wide CTP in information collection and dissemination activities	A	B	C	D	E	F
9. Provide evaluation data to the CTP central office	A	B	C	D	E	F
10. Conduct annual needs assessment/resource identification survey to identify training resources and priorities	A	B	C	D	E	F
11. Assist AB 1470 School-Based Grants program by conducting orientation workshops and other support services	A	B	C	D	E	F
12. Conduct annual regional CTP Technology Leadership Academy	A	B	C	D	E	F
13. Conduct locally determined workshops	A	B	C	D	E	F
14. Host a downlink site for annual CTP satellite broadcasts as requested	A	B	C	D	E	F
15. Submit a "Final Activities Report" to the CTP central office no later than October 15th.	A	B	C	D	E	F

Local Objectives

	A	B	C	D	E	F
	A	B	C	D	E	F
	A	B	C	D	E	F
	A	B	C	D	E	F
	A	B	C	D	E	F

next year changes:

BEST COPY AVAILABLE

2. **Consortium Staff Activity.** Estimate the total number of hours of consortium staff time allocated to each of the activities and complete the table below.

CTP Activity Category	Consortium Coordinator	Technical/Clerical Support	Contract Consultants	Other:________ ____________	Other:________ ____________
Overall planning and management					
CTP State and Local Council Meetings.					
Staff development workshops					
Coordination with other agencies					
Reports and surveys					
CSUNET and TRIE					
AB 1470 project support					
Other: ____________					
Other: ____________					
Total Hours					

next year changes:

3. **Professional Development.** For each workshop conducted before September 15, of the year assessed

- Provide the *workshop title* and *date.*
- Check the appropriate column for *time spent.*
- Enter the number of teachers and administrators that attended.
- Check (√) the *type of workshop* conducted.
- Check the the type(s) of *co-sponsors* and the assistance they provided.
- Check the appropriate column to indicate the extent of consortium involvement in the presentation of the workshop.

		Length of Wkshp.				Type of Workshop										Co-Sponsors						
						AB 1470			TLA				Model Tech. Sch.			Type				Assistance		
Workshop Title	**Workshop Date**	Half-Day or Less	1-2 Days	2-5 Days	**Number of Attendees**	Technology Use Planning	AB 1470 Grant Support	Sch. Application Reviews	English-Language Arts	History-Social Science	Math	Other	MTS Level I	MTS Level II	**Locally Initiated Workshop Topic**	School/District	County Office of Ed.	Business/Industry	College/University	Funding	Planning	Implementation
1.																						
2.																						
3.																						
4.																						
5.																						
6.																						
7.																						
8.																						
9.																						
10.																						
11.																						
12.																						
13.																						
14.																						
15.																						
16.																						
17.																						
18.																						
19.																						
20.																						

4. **Support for AB 1470 School-Based Projects.** Estimate the level of staff effort dedicated to each of the activities (circle the appropriate percentage for each activity):

Activity	Level of Effort				
	Low		Moderate		High
Technology use planning workshops	1	2	3	4	5
Proposal development workshops	1	2	3	4	5
Site-level proposal development assistance	1	2	3	4	5
Assisting in state grant reviews	1	2	3	4	5
Newsletter articles related to AB 1470	1	2	3	4	5
School-based grant evaluation training	1	2	3	4	5
Other AB 1470 support activities (specify):					
____________________	1	2	3	4	5
____________________	1	2	3	4	5
____________________	1	2	3	4	5
Other resources provided (specify):					
____________________	1	2	3	4	5
____________________	1	2	3	4	5
____________________	1	2	3	4	5

next year changes:

5. **Publication Production.** Use the table below to provide the number of editions and copies of each consortium-produced publication or product for the year assessed.

Publications Produced or Distributed by Consortium	Number of Publications	Number of Copies Printed
Workshop Schedules		
Consortium Newsletters		
Announcements, Brochures, Flyers		
Other (specify):		
Total	n/a	

next year changes:

6. **THE YEAR ASSESSED Evaluation Implementation Procedures.** Has your consortium conducted formal evaluations of the impact of any of the following services or activities (circle **Y** or **N** for each item):

Agency Service or Activity	Yes	No
Technology Leadership Academies	Y	N
Technology use planning workshops	Y	N
AB 1470 proposal writing workshops	Y	N
Other AB 1470 project assistance	Y	N
Consortium publications (flyers, newsletters, etc.)	Y	N
On-site technical assistance	Y	N
Telephone assistance	Y	N
List locally initiated services or activities: ____________	Y	N
____________	Y	N
____________	Y	N

For any items checked yes, briefly describe the evaluation procedure used (e.g., survey; who completed it and how many?) Please attach a copy of any reports on consortium activities.

Description:

7. **Collaboration with Other Agencies.** Complete the table below as follows:

- Circle the appropriate number to indicate the estimated level of collaboration with each of the agencies listed.
- Provide examples of important and/or frequent collaborative activities or projects

Possible Agency Collaborators	**Level**	**Examples**
	None Moderate Extensive	
County Office(s) of Education	1 2 3 4 5	
ITV Agencies	1 2 3 4 5	
Subject Matter Projects (California Writing, Literature, Math, etc.)	1 2 3 4 5	
Business and Industry	1 2 3 4 5	
Other CTP Regional Consortia	1 2 3 4 5	
Professional Associations (CUE, ACSA, CTA, etc.)	1 2 3 4 5	
SB 1882 Staff Development Consortia	1 2 3 4 5	
Educational Telecommunications Network (ETN)	1 2 3 4 5	
California Department of Ed. Educational Technology Unit	1 2 3 4 5	
Other (describe):	1 2 3 4 5	
Other:	1 2 3 4 5	
Other:	1 2 3 4 5	
Other:	1 2 3 4 5	

next year changes:

IV. FUNDING RESOURCES AND CONSTRAINTS

1. **Revenue.** Fill in the table below.

	Revenue Sources and Amounts Received to Conduct CTP Activites	**Amount Received**
Direct Funding Sources	State AB 1470 funds from CTP	$
	Workshop fees	
	Membership fees - Cost recovery? Yes_____ No_____	
	Direct fiscal agency/host contribution	
	Sale of publications, etc.	
	Business contributions	
	Other grants (list):	
	Other (list):	
	Total direct cash revenue	

Estimated value of in-kind support (from Page 12)	

Total revenue	

next year changes:

2. **Funding for Consortium Staff Activity.** Considering the total scope of CTP activities for the year assesed, estimate the following:

   a. The percentage of staff time funded by the CTP grant .... ___________%
   b. The percentage of staff time funded by the host agency .... ___________%
   c. The percentage of staff time donated by volunteers .... ___________%

3. **Estimated In-kind Support.*** Complete the table below as follows:

- Indicate the level of in-kind support received by the consortium from each source by circling the appropriate number.
- Provide an example of the in-kind support.
- Enter the estimated dollar value of the in-kind support that your consortium received.

Sources of Support and Contributions	**Level** None Moderate Extensive	**Examples**	**Estimated Value**
Fiscal Agent or Host Agency	1 2 3 4 5		$
County Offices of Education	1 2 3 4 5		
School District(s)	1 2 3 4 5		
Other CTP Consortia	1 2 3 4 5		
Calif. Tech. Project (CTP) (Above basic consortium grant)	1 2 3 4 5		
ITV Agencies	1 2 3 4 5		
Colleges and Universities	1 2 3 4 5		
Business/Industry	1 2 3 4 5		
Other (describe):	1 2 3 4 5		
Other:	1 2 3 4 5		
Other:	1 2 3 4 5		
Other:	1 2 3 4 5		
Other:	1 2 3 4 5		

Total In-kind Support	$

* Include volunteer services, donations, hardware/software, or anything else that can have a dollar value assigned to it.

next year changes:

4. **Expenditures.** Enter separately the amount of the AB 1470 funding, fiscal agent funding, and donations expended for each of the budget categories indicated:

CTP Consortium Project Expenses for 1989-90

(Round to the Nearest $)

	Explanation of Expenditure	AB 1470 Funding	Fiscal Agent Funding	Estimated Value of Donations
1000 Professional Staff Salaries	Consortium Coordinator			
	Professional Staff			
	Other:			
	Subtotal for 1000 Series	$	$	$
2000 Classified/Support Staff Salaries	Technical Support			
	Clerical Support			
	Other:			
	Subtotal for 2000 Series	$	$	$
3000	Staff Benefits:	$	$	$
4000 Materials/Supplies	Printing: Newsletters			
	Software			
	Office Supplies			
	Other:			
	Subtotal for 4000 Series	$	$	$

(Round to the Nearest $)

		Explanation of Expenditure	AB 1470 Funding	Fiscal Agent Funding	Estimated Value of Donations
5000 Contract Services/Expenses	Services	Consultants			
	Expenses	Facilities			
		Travel			
		Subtotal for 5000 Series	$	$	$
Indirect Costs: Indirect costs are not a required item and can only be entered when a rate has been established. Indirect costs computations exclude the 6000 category. Rate_________%					
6000 Capital Outlay	Equipment	Computers			
		Software			
		Other:			
		Subtotal for 6000 Series	$	$	$
TOTALS			$	$	$
GRAND TOTAL					

next year changes:

5. **Factors Facilitating or Impeding Service Delivery.** Review each of the following factors and:

- Rate the extent to which each was a facilitating factor or an impediment to the ability of the consortium to deliver effective services by circling a number from the following scale:

- 3 = Major impediment
- 2 = Moderate impediment
- 1 = Slight impediment
0 = Not a factor that affects agency operation
+1 = Slight facilitating factor
+2 = Moderate facilitating factor
+3 = Major facilitating factor

- Add any comments in the spaces provided (especially if a +3 or -3 was circled).

Rating (circle one)
(-) ⟵⟶ (+)

A. Geographic size of service area	-3 -2 -1 0 +1 +2 +3
Comments:	
B. Lack of geographically defined service area	-3 -2 -1 0 +1 +2 +3
Comments:	
C. Interaction with CTP central office	-3 -2 -1 0 +1 +2 +3
Comments:	
D. Fiscal agent for the consortium	-3 -2 -1 0 +1 +2 +3
Comments:	
E. The California Department of Education (CDE)	-3 -2 -1 0 +1 +2 +3
Comments:	
F. County office(s) of education	-3 -2 -1 0 +1 +2 +3
Comments:	
G. Technology manufacturers/vendors	-3 -2 -1 0 +1 +2 +3
Comments:	
H. Colleges and universities	-3 -2 -1 0 +1 +2 +3
Comments:	
I. Business and industry	-3 -2 -1 0 +1 +2 +3
Comments:	
J. Recruiting districts or schools for membership	-3 -2 -1 0 +1 +2 +3
Comments:	

Rating

(-) ← | → (+)

K. Level of support from the host agency	-3 -2 -1 0 +1 +2 +3
Comments:	

L. Level of support from membership fees	-3 -2 -1 0 +1 +2 +3
Comments:	

M. Availability of staff and/or consultants to provide professional development	-3 -2 -1 0 +1 +2 +3
Comments:	

N. Capabilities for producing and distributing CTP publications	-3 -2 -1 0 +1 +2 +3
Comments:	

O. The availability of CSUNet	-3 -2 -1 0 +1 +2 +3
Comments:	

P. Describe and rate other factors that influence the ability of the consortium to deliver services:

1.	-3 -2 -1 0 +1 +2 +3
Comments:	
2.	-3 -2 -1 0 +1 +2 +3
Comments:	
3.	-3 -2 -1 0 +1 +2 +3
Comments:	
4.	-3 -2 -1 0 +1 +2 +3
Comments:	

next year changes:

V. OUTCOMES

1. **Impact of Services.** Complete the table below as follows:

- If a service was not offered, circle n/a
- Rate the effectiveness or value to participants of each service that was offered by circling the appropriate number. Feedback can range from completion of formal evaluation instruments to informal comments and testimony.
- Rate the need for increased service by circling the appropriate number.
- Circle S if your ratings are based on data obtained from a survey of users or C if based on informal comments, testimony, and/or your own general perception.

CTP Activity		Effectiveness or Value					Need for increased Service					Data Source	
		Not at All		Moderate		High	None		Moderate		High		
Technology Leadership Academies	n/a	1	2	3	4	5	1	2	3	4	5	S	C
CSUNet electronic bulletin board	n/a	1	2	3	4	5	1	2	3	4	5	S	C
AB 1470 tech. use planning workshop	n/a	1	2	3	4	5	1	2	3	4	5	S	C
AB 1470 proposal writing workshops .	n/a	1	2	3	4	5	1	2	3	4	5	S	C
Periodic consortium meetings	n/a	1	2	3	4	5	1	2	3	4	5	S	C
Local consortium newsletters	n/a	1	2	3	4	5	1	2	3	4	5	S	C
CTP Quarterly	n/a	1	2	3	4	5	1	2	3	4	5	S	C
Teleconferences	n/a	1	2	3	4	5	1	2	3	4	5	S	C
Technology evaluation training	n/a	1	2	3	4	5	1	2	3	4	5	S	C
Other: (specify):________________	n/a	1	2	3	4	5	1	2	3	4	5	S	C
Other:____________________________ ...	n/a	1	2	3	4	5	1	2	3	4	5	S	C
Other:____________________________ ...	n/a	1	2	3	4	5	1	2	3	4	5	S	C

next year changes:

2. **Benefits of Services.** Of all CTP initiated activities and resources provided during the year assessed (up to September 15th) describe those that were of greatest benefit as follows:

CTP Activities and/or Resources	Benefits to Educators

2. **Marketing Effort and Impact.** Complete the table below as follows:
   - Circle **n/a** if the activity was not conducted.
   - Circle the appropriate number to indicate the level of effort devoted to each marketing activity.
   - Circle the appropriate number to indicate the level of impact produced by each marketing activity.

Marketing Activity		Level of Effort					Level of Impact				
		None		Moderate		High	None		Moderate		High
Direct Approaches (letters, calls to schools)	n/a	1	2	3	4	5	1	2	3	4	5
Announcements, Brochures, Flyers	n/a	1	2	3	4	5	1	2	3	4	5
Publication of Articles in Journals and Magazines	n/a	1	2	3	4	5	1	2	3	4	5
Exhibit Booth at Educational Conferences	n/a	1	2	3	4	5	1	2	3	4	5
Making Presentations at Conferences	n/a	1	2	3	4	5	1	2	3	4	5
Supporting/Facilitating Technology User Groups	n/a	1	2	3	4	5	1	2	3	4	5
Soliciting Business and Industry Partnerships	n/a	1	2	3	4	5	1	2	3	4	5
Other (fill-in):	n/a	1	2	3	4	5	1	2	3	4	5
	n/a	1	2	3	4	5	1	2	3	4	5
	n/a	1	2	3	4	5	1	2	3	4	5

Anticipated next year changes:

3. Cost Benefits

a. Given the objectives and expectations of the CTP Regional Consortia, has the funding level for your CTP Consortium been (circle one):

Very insufficient 1
Somewhat insufficient 2
Adequate 3
More than adequate 4

b. Would it have been possible to accomplish what your consortium has achieved without the existence of in-kind funding and volunteer assistance (circle one):

Yes 1
No 2
Not sure 3

Comments:

c. Would the in-kind support and volunteer help have occurred without the AB 1470 CTP funding (circle one):

Yes 1
No 2
Not sure 3

Comments:

d. To what extent would your CTP Regional Consortium continue to operate if the state (AB 1470) funding were terminated (circle one):

Discontinue all services 1
Discontinue most services 2
Discontinue some services 3
Continue at the same level 4

Comments:

e. In general, do you believe the CTP Consortia model is a cost-effective approach to providing regional support services (circle one):

Yes 1
No 2

If no, explain better alternatives:

4. **Recommendations.** Review all of your responses and make recommendations for each of the following areas as needed:

Organizational structure:

Service regions:

Services offered:

Level of support and sources of other revenue:

Planning:

Collaboration with other agencies:

Evaluation:

CTP governance structure:

AB 1470 funding:

State CTP support:

Coordination with other state programs (SB 1882, etc.):

State expectations for CTP Consortia:

Other:

5. **Other Information.** Please provide any other information that you believe is relevant to the operation of your CTP Consortium:

For assistance or further information related to the completion of this form contact:
John Cradler, 415-565-3018 or 415-344-7046; FAX: (415) 344-3604;
AppleLink: K1686; CSUNET: jcradle

CALIFORNIA TECHNOLOGY PROJECT REGIONAL CONSORTIA TELEPHONE SURVEY FOR FISCAL YEAR 1989-90

California Department of Education and Far West Laboratory for Educational Research and Development

Consortium Title: ______________________________

Mailing Address: ______________________________

Person(s) providing information: (title)______________________________

Telephone:

1. **1989-90 Regional Area.** Please describe the geographic area served by your consortium.

Number of Counties Served: Number of Districts within the Region:
List Counties Primarily Served:

2. **1989-90 Consortium Objectives.** Tell me briefly the major objectives that were established for 1989-90:

3. **1989-90 Consortium Activities.** Please list for me the major activities and the number of times that they were held/completed during 1989-90:

4. **1989-90 Services.** How would you rate the effectiveness of each of those major activities?
Not sure Somewhat Moderate High

5. **1989-90 Consortium Staff Involvement.** Please estimate the amount of staff time in FTEs (Full Time Equivalents) allocated to accomplishing your CTP's 1989-90 objectives/activities (even if only fractional). (Consider only staff time funded by CTP with AB 1470 funds)

6. **Other Staff Support.** Have any other staff members from your host agency allocated time to any of those CTP activities? Yes ☐ No ☐ If yes, estimate the level of staff support (in amount of time or in FTEs).